



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**INSURGENT DESIGN: THE RE-EMERGENCE OF
AL-QA'IDA FROM 9/11 TO THE PRESENT**

by

Joshua A. Russo

December 2015

Thesis Advisor:
Co-Advisor:

Glenn E. Robinson
Nancy C. Roberts

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE December 2015	3. REPORT TYPE AND DATES COVERED Master's thesis		
4. TITLE AND SUBTITLE INSURGENT DESIGN: THE RE-EMERGENCE OF AL-QA'IDA FROM 9/11 TO THE PRESENT			5. FUNDING NUMBERS	
6. AUTHOR(S) Joshua A. Russo				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol number ____N/A____.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited			12b. DISTRIBUTION CODE	
13. ABSTRACT (maximum 200 words) Analysts disagree on how to characterize al-Qa'ida's evolution. One perspective regards jihadi-Islamism in general to be self-marginalizing. A second perspective describes the merging of discrete jihadist grand strategies that is considered symptomatic of the decline of al-Qa'ida and its allies. A third finds that al-Qa'ida is gathering strength. This study expands upon the gathering strength perspective, contending that al-Qa'ida's successes are derived from its design orientation and competence. Al-Qa'ida agents have vigorously redesigned their transnational system to adapt to a profoundly hostile and unpredictable environment. For al-Qa'ida and its brethren, the highest rate of adaptation is occurring on the battlefield, as they experiment with varied technologies of warfare, rather than in debate over grand strategic ideas. Where before there were fleeting, desultory actions by terroristic cells, now maturing organizations vie for territorial control, establishing jihadi emirates and proto-states. To respond effectively to the situation, Western understanding of al-Qa'ida and the wider system of jihadi-Islamist insurgency must evolve apace.				
14. SUBJECT TERMS al-Qa'ida, complex adaptive systems, design theory, insurgency, Islamism, jihadism, organization change, organization design, state formation, terrorism			15. NUMBER OF PAGES 81	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU	

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. Z39-18

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

**INSURGENT DESIGN: THE RE-EMERGENCE OF
AL-QA'IDA FROM 9/11 TO THE PRESENT**

Joshua A. Russo
Major, United States Army
B.A., Vanderbilt University, 2003

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN DEFENSE ANALYSIS

from the

**NAVAL POSTGRADUATE SCHOOL
December 2015**

Approved by: Glenn E. Robinson
Thesis Advisor

Nancy C. Roberts
Co-Advisor

John Arquilla
Chair, Department of Defense Analysis

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

Analysts disagree on how to characterize al-Qa'ida's evolution. One perspective regards jihadi-Islamism in general to be self-marginalizing. A second perspective describes a merging of discrete jihadist grand strategies that is considered symptomatic of the decline of al-Qa'ida and its allies. A third finds that al-Qa'ida is gathering strength. This study expands upon the gathering strength perspective, contending that al-Qa'ida's successes are derived from its design orientation and competence. Al-Qa'ida agents have vigorously redesigned their transnational system to adapt to a profoundly hostile and unpredictable environment. For al-Qa'ida and its brethren, the highest rate of adaptation is occurring on the battlefield, as they experiment with varied technologies of warfare, rather than in debate over grand strategic ideas. Where before there were fleeting, desultory actions by terroristic cells, now maturing organizations vie for territorial control, establishing jihadi emirates and proto-states. To respond effectively to the situation, Western understanding of al-Qa'ida and the wider system of jihadi-Islamist insurgency must evolve apace.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	EXISTING PERSPECTIVES.....	5
A.	THE MARGINALIZATION PERSPECTIVE	5
B.	THE HYBRIDIZATION PERSPECTIVE.....	6
C.	THE GATHERING STRENGTH PERSPECTIVE	8
D.	AL-QA'IDA AFTER THE ARAB SPRING	9
III.	A DESIGN PERSPECTIVE	13
A.	DESIGN FUNDAMENTALS	13
1.	What is Design Competence?.....	15
B.	AL-QA'IDA AS A DESIGN-COMPETENT ORGANIZATION	17
1.	Responding to a Chaotic Environment	20
a.	<i>Exploiting Emergent Battlefields</i>	<i>21</i>
b.	<i>Leveraging Political Disorder.....</i>	<i>25</i>
2.	Adapting toward the Local Ultimate Particular	28
a.	<i>Al-Qa'ida in Syria</i>	<i>28</i>
b.	<i>Al-Qa'ida in South Asia.....</i>	<i>31</i>
3.	Reconfiguring al-Qa'ida's Technology of Warfare	32
a.	<i>Building Doctrine for Insurgent Warfare.....</i>	<i>33</i>
b.	<i>Exporting Proven Fighting Structures and Technologies.....</i>	<i>38</i>
4.	An Emergent Transnational System	40
a.	<i>A Federated Macro-Structure Emerges</i>	<i>41</i>
b.	<i>Macro-level Evolution and Maturation of Fighting Structures</i>	<i>43</i>
c.	<i>Innovate or Die.....</i>	<i>48</i>
IV.	IMPLICATIONS	51
A.	THE AL-QA'IDA ENTERPRISE IN A JIHADI MARKET.....	51
B.	A COMPLEX ADAPTIVE SYSTEM.....	52
C.	THE EARLY STAGES OF STATE FORMATION	54
V.	CONCLUSION	59
	LIST OF REFERENCES	61
	INITIAL DISTRIBUTION LIST	69

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGEMENTS

I am grateful to my advisors, Dr. Glenn Robinson and Dr. Nancy Roberts, for their expert guidance and critique, without which this thesis would have been all but impossible. I would also like to thank Dr. Craig Whiteside and Dr. Siamak Naficy, both of whom provided critical input to my research methodology and conceptualization of al-Qa'ida's evolution. My good friend and fellow Marine Corps veteran Jim Misencik helped me formulate my thoughts through many hours of discussion. Last but certainly not least, my wife, Claire, fielded my absurd questions about jihad and revolution, managed to streamline my thinking on numerous occasions, and displayed supreme patience as I meandered through the research process.

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

In the study of al-Qa'ida, there are divergent perspectives on how to characterize its evolution, especially in the period after the 9/11 attacks. One perspective holds that the Qa'ida phenomenon tends to be self-marginalizing—that its own radical vision and violent program will drive it over time to the fringes of society.¹ A second perspective describes hybridization in al-Qa'ida and the broader jihadi-Islamist² movement, wherein previously discrete guiding ideologies and strategies are merging to form a composite of strategic preferences. In the main, hybridization is characterized as symptomatic of systemic weakness within the jihadist sphere.³ A third perspective finds that al-Qa'ida and its allies are gathering strength, manifesting a capacity to adapt to a changing environment.⁴

This study supports the third perspective that al-Qa'ida and its jihadi-Islamist brethren are gathering strength.⁵ However, it extends this point of view by exploring the factors that account for the evolution of the Qa'ida organization. In particular, I contend here that al-Qa'ida's successes are derived from its design orientation and competence.

Design is the process by which humans exercise agency to change their environments, through creation of tools, technological systems, organizations and modes

¹ This perspective is exemplified by works such as the following: Akbar Ahmed, *The Thistle and the Drone: How America's War on Terror Became a Global War on Tribal Islam* (New York, NY: HarperCollins, 2013); Nelly Lahoud, *The Jihadis' Path to Self-Destruction* (Oxford, UK: Oxford University Press, 2010).

² I use the compound term “jihadi-Islamism” to distinguish those groups, such as al-Qa'ida, that advocate the use of violent struggle to achieve Islamist political objectives, whether at the local, regional or international level.

³ This perspective is articulated by Thomas Hegghammer and Steven Brooke: Thomas Hegghammer, “The Ideological Hybridization of Jihadi Groups,” *Current Trends in Islamist Ideology* 9 (2009): 1–11; Steven Brooke, “Strategic Fissures: The Near and Far Enemy Debate,” in *Self-Inflicted Wounds: Debates and Divisions within Al-Qa'ida and Its Periphery*, ed. Assaf Moghadam and Brian Fishman (West Point, NY: Combating Terrorism Center, 2010), 45–68.

⁴ This perspective is exemplified by works such as the following: Abdel Bari Atwan, *After Bin Laden: Al Qaeda, the Next Generation* (New York, NY: The New Press, 2013); Syed Saleem Shahzad, *Inside Al-Qaeda and the Taliban: Beyond Bin Laden and 9/11* (New York, NY: Pluto Press, 2011).

⁵ I differentiate the Islamic State group (variously referred to as ISIS, ISIL and DAISH, based on its earlier moniker, “the Islamic State of Iraq and Syria”) from al-Qa'ida and its allies. Despite the rise of the Islamic State group as a powerful rival to al-Qa'ida, the latter continues to display indications of gathering strength when compared to earlier phases of its evolution.

of thinking. Particular designs tend to *emerge* from the design endeavor, due to the dynamic interplay between human agency and environment.⁶ While design is fundamental to humanity, certain human social organizations tend to engage in design more fluently than others, depending on both internal and external factors. Also, I contend here that certain environmental conditions—especially those under which group experimentation is critical to group survival—are more conducive to design than others. Those organizations that are capable of exploiting such conditions are likely to see their design projects accelerated.

Al-Qa’ida has proved itself to be one of those highly fluent design organizations. Observing and responding to a profoundly hostile and unpredictable world, al-Qa’ida agents have vigorously redesigned their transnational system to adapt to socio-political and military conditions. The epicenter of al-Qa’ida adaptation and redesign resides in its *technology of warfare*—its doctrine, fighting structures and associated technologies. The technology of warfare is the socio-technical apparatus that an entity employs to wage war.⁷ Here, in the jihadi-Islamist case, it is how insurgency is waged.

Since 9/11, the Qa’ida organization has matured through trial-and-error interaction with enemies and competitors on the battlefield. It has exploited emergent battlefields and conditions of political disorder; purposively adapted to a diverse set of local conditions; reconfigured its technology of warfare; experimented with variant combinations of doctrine, fighting structures and specific technologies; and exported proven fighting structures, technologies and doctrinal models across its transnational system. By investing resources in promising ventures—and reallocating away from failures—it has learned and repeatedly managed to position itself in favorable strategic

⁶ Harold G. Nelson and Erik Stolterman, *The Design Way: Intentional Change in an Unpredictable World* (Cambridge, MA: MIT Press, 2012), 37.

⁷ The concept of a “technology of warfare” is akin to psychologist Barry Schwartz’s “technology of ideas.” Schwartz described the latter as the modes, structures and devices of thinking that a society employs to imagine, organize and motivate itself. John Arquilla has articulated how such a “technology of warfare” is composed and exercised, including how doctrine, structure, technology and strategy constitute an interrelated system. See Barry Schwartz, “The way we think about work is broken,” *TED* video, 8:02, March 2015, http://www.ted.com/talks/barry_schwartz_the_way_we_think_about_work_is_broken; and John Arquilla, “The New Rules of War,” *Foreign Policy*, February 11, 2010, accessed December 15, 2015, foreignpolicy.com/2010/02/11/the-new-rules-of-war/.

positions despite costly attrition and resounding defeats. Furthermore, while the inter-jihadist debate at the level of grand strategic ideas remains important, it is less important than the acceleration of organizational experimentation and feedback generated by the proliferation of active battlefields and chaotic political spaces throughout the Middle East, Asia and Africa.

The application of a design lens to the study of al-Qa'ida contributes to improved understanding of the organization's persistence and pattern of re-emergence. It also illuminates how the United States ought to respond to the challenges posed by al-Qa'ida and other jihadi-Islamist groups in the future. The implications of al-Qa'ida's design orientation and competence are numerous. First, al-Qa'ida design agents work within an increasingly expansive, energetic and competitive jihadi market—where competition stands to both fragment and advance collective jihadist causes. Second, the broad field of jihadi-Islamism—in which al-Qa'ida played a leading role for the better part of a decade and half—displays characteristics of a complex adaptive system that is self-organizing and co-evolving with its environment.

Third, it appears that al-Qa'ida's evolution over the last decade-and-a-half is analogous—albeit at a sub-state, inter-organizational level—to the process of state formation through warfare articulated by Charles Tilly in 1992. Whereas Tilly articulates how “war makes states and states make war,”⁸ in this case, jihadist organizations make insurgency and insurgency makes organizations that are more robust. Increasingly these organizations manifest state-like characteristics in the territories in which they operate—a phenomenon that is not restricted to the self-declared Islamic State, itself an al-Qa'ida offshoot. To contend with an emergent jihadi-Islamist insurgency effectively, Western understanding of the Qa'ida phenomenon is compelled to evolve apace.

This study is organized as follows: the first section reviews existing perspectives on how to characterize al-Qa'ida's evolution; the second elaborates on the design approach, and then proceeds with an examination of the Qa'ida organization's design competence; and the third presents implications of that examination.

⁸ Charles Tilly, *Coercion, Capital, and European States, AD 990–1992* (Cambridge, MA: Blackwell, 1992), 67–95.

THIS PAGE INTENTIONALLY LEFT BLANK

II. EXISTING PERSPECTIVES

A. THE MARGINALIZATION PERSPECTIVE

One perspective on al-Qa'ida's evolution holds that the organization is trending over time toward isolation at the fringes of society. Moreover, the global jihadist movement's ideological-strategic premise—that extreme violence is necessary to achieve political objectives—is inherently self-limiting and self-destructive. Fawaz Gerges articulated the rationale for the defining al-Qa'ida turn toward targeting the United States in his 2005 *Far Enemy: Why Jihad Went Global*. By 2014, he observed an al-Qa'ida at its nadir: unable to contend with a changing geopolitical reality, it had exhausted the bank of international public attention generated by the 9/11 attacks.⁹ Nelly Lahoud also assessed the Qa'ida trend after the Arab Spring revolutions, and concluded that its inherently violent premise tended to be counterproductive when it came to achievement of espoused revolutionary objectives within the Arab-Muslim political system.¹⁰

In 2013, Akbar Ahmed characterized al-Qa'ida as a nearly extinct phenomenon, an entity whose ideas were perpetuated, in spite of itself, by the misguided militarism of the United States in its role as a world system hegemon. Akbar pointed to a central trap in the War on Terror construct: the band of jihadists known as al-Qa'ida originated from and embedded itself after 9/11 in Muslim tribal communities on the periphery of the international system. Hence, in making war on “al-Qa'ida,” the United States was effectively making war on tribal Islam—thereby sustaining the geo-strategic fantasy of Osama bin Laden and Ayman al-Zawahiri on life support.¹¹

Meanwhile, Mohammed Hafez examined the broader structural mechanics of resistance, revolution and state repression. He observed that violent extremist organizations subject to effective repression generally burrowed deeper underground to

⁹ Fawaz Gerges, *The Far Enemy: Why Jihad Went Global* (London: Cambridge University Press, 2009); Fawaz Gerges, *The Rise and Fall of Al-Qaeda* (Oxford: Oxford University Press, 2014).

¹⁰ Nelly Lahoud, *The Jihadis' Path to Self-Destruction* (Oxford: Oxford University Press, 2010).

¹¹ Akbar Ahmed, *The Thistle and the Drone: How America's War on Terror Became a Global War on Tribal Islam* (Washington, DC: Brookings Institution Press, 2013).

protect themselves, leading to isolation from any productive revolutionary-political discourse.¹² Caleb Carr assessed al-Qa'ida in light of terrorist campaigns throughout history, arguing that terror rarely achieved its purported objectives, and was often self-defeating.¹³

B. THE HYBRIDIZATION PERSPECTIVE

A second perspective on al-Qa'ida's evolution finds that guiding jihadist ideologies and strategic approaches tend to merge after 9/11. Previously, they maintained relatively distinct grand strategic lines of thinking or bounded schools of thought—such as the Qa'ida leadership's prioritization of strikes against the United States rather than engagement in local insurgencies. Now, these lines of thinking were becoming entangled, their boundaries less discernible. Increasingly, al-Qa'ida and its allies behaved and communicated in ways that indicated adoption of composite or “hybrid” strategic preference orderings. In the main, observers of the hybridization phenomenon interpreted it as symptomatic of systemic weakness: despite short-term gains of hybridizing, the strength of the jihadi-Islamist movement appeared to be dissipating. This notwithstanding, they warned that al-Qa'ida and its brethren were still dangerous and ought not to be dismissed.¹⁴

The hybridization perspective can be traced back to a broader discourse on jihadi strategic debate. Between 2004 and 2008, Thomas Hegghammer, Brynjar Lia and Steven Brooke illuminated a long-standing practice of pragmatic strategic debate among some leading jihadist thinkers. An important concept emerged: global jihadists were not only fanatical ideologues—many were calculating rational actors who could and did place strategic imperatives ahead of theological dictates.¹⁵ In part, this pragmatic strategic

¹² Mohammed M. Hafez, *Why Muslims Rebel: Repression and Resistance in the Islamic World* (Boulder, CO: Lynne Rienner, 2003).

¹³ Caleb Carr, *The Lessons of Terror: A History of Warfare Against Civilians* (New York, NY: Random House, 2003).

¹⁴ Hegghammer, “The Ideological Hybridization of Jihadi Groups”; Moghadam and Fishman, eds., *Self-Inflicted Wounds*, 1–18.

¹⁵ Steven Brooke, “Jihadist Strategic Debates before 9/11,” *Studies in Conflict and Terrorism* 31 (2008): 201–226; Brynjar Lia and Thomas Hegghammer, “Jihadi Strategic Studies: The Alleged al Qaeda Policy Study Preceding the Madrid Bombings,” *Studies in Conflict and Terrorism* 27 (2004): 355–375.

debate revolved around macro-level ideas, such as whether to focus on enemies that were “near” or “far” at hand. Additionally, it pertained to the development of more field-level doctrine, as Lia described in his biography of Syrian jihadist trainer, strategist and historian Abu Mus’ab al-Suri.¹⁶

In 2009, Hegghammer specifically pointed to an “ideological hybridization” in the jihadi movement, whereby previously sharply defined grand strategic ideas about how to pursue jihadist objectives were becoming intermixed in the course of the American war against al-Qa’ida and its allies. Hegghammer defined jihadi hybrid forms as those containing near equal parts of what were previously discrete ideologies or grand strategic ideas. He also observed that the jihadists’ “enemy hierarchies”—their prioritized listings of opponents—were becoming compressed or aggregated.¹⁷

In 2010, the Combating Terrorism Center (CTC) at West Point produced a wide-ranging study of endogenous factors contributing to systemic weaknesses in the Qa’ida-led global jihadist movement, titled *Self-Inflicted Wounds*. That study also highlighted a trend toward hybridized jihadist strategic approaches, such as amalgams of near and far enemy targeting, generally attributed to the increased presence of Western forces in Muslim-majority states.¹⁸ Both Hegghammer and the CTC study concluded that this hybridization phenomenon—though it offered short-term benefits to the movement and posed certain dangers to the United States and its allies—was symptomatic of longer-term weakness in the jihadist system. The erosion of more clearly demarcated ideologies and strategic approaches suggested desperate collective attempts to draw jihadi recruits, some of whom might not have subscribed to a given group’s previously sharply-defined strategic vision. In short, al-Qa’ida and its brethren were adapting, in part by manipulating and mixing strategic ideas to mobilize support across a widening field of

¹⁶ Brynjar Lia, *Architect of Global Jihad: The Life of Al-Qaida Strategist Abu Mus’ab Al-Suri* (New York, NY: Columbia University Press, 2008).

¹⁷ Hegghammer, “The Ideological Hybridization of Jihadi Groups,” 1–8.

¹⁸ Hegghammer, “The Ideological Hybridization of Jihadi Groups,” 6; Brooke, “Strategic Fissures,” 45–46.

jihadi efforts, but they were also no closer to realizing any of their espoused objectives, and had been badly decimated to boot.¹⁹

Hegghammer expounded on the subject of jihadist ideological and strategic framing in his 2010 examination of *Jihad in Saudi Arabia*. He focused on the interplay between guiding jihadi ideas, strategic approaches and capacity to generate popular support, showing in part that al-Qa'ida's revolutionary activities inside of the Saudi Kingdom between 2003 and 2008 were unsupportable, particularly when compared to the appeal of so-called "classical jihad" in neighboring Iraq.²⁰

C. THE GATHERING STRENGTH PERSPECTIVE

Abdel Bari Atwan, Syed Saleem Shahzad and Bruce Reidel characterized al-Qa'ida as a dynamic learning organization that was rebuilding itself over time and, on balance, growing stronger as a jihadi-Islamist revolutionary movement. Shahzad, who based his work largely on interviews with al-Qa'ida and Taliban operatives in Pakistan and Afghanistan, contended not only that the organization was actively redefining and restructuring itself, but also that its leading operators were talented asymmetric strategists and calculating students of geopolitics. Shahzad also alleged that al-Qa'ida operatives were engaged in systematic infiltration of Pakistan's state security establishment.²¹ Atwan, writing in 2011, contended that al-Qa'ida had transformed itself into a movement that was vigorously expanding into new socio-political spaces opened by the Arab Spring revolutions—all in spite of al-Qa'ida's defeat at the hands of the American military "surge" in Iraq and the loss of key leaders. Atwan also observed active transmission of people, ideas and resources among the various branches and jihad fronts within al-Qa'ida's organizational network.²² Riedel contributed a series of works on al-Qa'ida's

¹⁹ Hegghammer, "The Ideological Hybridization of Jihadi Groups," 1, 7–8; Moghadam and Fishman, eds., *Self-Inflicted Wounds*, 1–18.

²⁰ Thomas Hegghammer, *Jihad in Saudi Arabia: Violence and Pan-Islamism since 1979* (Cambridge: Cambridge University Press, 2010). This study leans heavily on Hegghammer's framework for comparing variant jihadist ideologies and grand strategies; see Hegghammer, *Jihad in Saudi Arabia*, 6.

²¹ Syed Saleem Shahzad, *Inside Al-Qaeda and the Taliban: Beyond Bin Laden and 9/11* (New York, NY: Pluto Press, 2011).

²² Abdel Bari Atwan, *After Bin Laden: Al Qaeda, the Next Generation* (New York, NY: New Press, 2013).

organizational evolution and pointed to a developing trend of “Qa’idaism.” His more recent material, including articles on “Al-Qaeda 3.0,” described the maturation of the organization and its allies in the wake of the Arab Spring.²³

There were also treatments of al-Qa’ida in the context of macro-level historical processes that implied growing strength or significance. Mohammad-Mahmoud Ould Mohamedou observed in al-Qa’ida a potent set of politico-military principles that were playing a pivotal role in the transformation of warfare.²⁴ John Robb interpreted the insurgency in Iraq, with an al-Qa’ida contingent in its vanguard, as a form of “open source warfare,” in which the guerrillas out-maneuvered the U.S.-led coalition due to their capacity to innovate more rapidly.²⁵

D. AL-QA’IDA AFTER THE ARAB SPRING

Most recently, a puzzle emerged in the wake of the Arab Spring revolutions: al-Qa’ida’s cause and related jihadist trends persisted and even advanced, gaining in the chaotic spaces that opened up as democratic revolutions were successively derailed or suppressed. Hegghammer readdressed this problem of interpreting an evolving jihadist phenomenon in a February 2014 post titled “Jihadism: Seven Assumptions Shaken by the Arab Spring.”²⁶ He alluded to a pressing question: how is it that, in the three years since the Syrian revolution opened in 2011 with peaceful massed demonstrations, we have seen the steady rise of jihadist emirates and proto-states in that country’s rebel-controlled territories? Previous conceptions of jihadist behavior were being called into question. Organizations whose activities were once characterized by the fleeting, desultory actions of terroristic cells were now maneuvering on open battlefields with small guerrilla armies

²³ Bruce Riedel, “The Continuing Evolution of Al-Qaeda 3.0,” *Al-Monitor*, January 3, 2014, <http://www.al-monitor.com/pulse/originals/2014/01/al-qaeda-terror-spread-iraq-lebanon.html>; Riedel, “Al Qaeda 3.0.”

²⁴ Mohammad-Mahmoud Ould Mohamedou, *Understanding Al Qaeda: Changing War and Global Politics* (London: Pluto Press, 2014).

²⁵ John Robb, *Brave New War: The Next Stage of Terrorism and the End of Globalization* (Hoboken, NJ: Wiley, 2008); John Robb, “The Open-Source War,” *New York Times*, October 15, 2005, <http://www.nytimes.com/2005/10/15/opinion/the-opensource-war.html>.

²⁶ Thomas Hegghammer, “Jihadism: Seven Assumptions Shaken by the Arab Spring,” *Project on Middle East Political Science*, February 3, 2014, accessed December 18, 2015, <http://pomeps.org/2014/02/03/jihadism-seven-assumptions-shaken-by-the-arab-spring/>.

equipped with tanks and other heavy weaponry. Lia offered related observations in 2015, noting that the emergence of jihadi proto-states since the start of the Arab Spring has already matched in number that of the several preceding decades.²⁷

Between 2013 and 2015, the rise of the self-declared Islamic State group—formerly al-Qa’ida’s branch in Iraq—introduced a new dimension to the study of al-Qa’ida’s evolution. Disagreements over strategy and organizational hierarchy led to al-Qa’ida’s divestment of the Islamic State group in February 2014, ushering in a wide-ranging jihadist civil war. In Syria, al-Qa’ida’s official branch, *Jabhat al-Nusrah*, has so far adhered to the espoused al-Qa’ida program despite broad ideological-strategic overlap with the more militarily powerful Islamic State group, and multiple opportunities to collaborate tactically against common enemies. On any given day, al-Qa’ida’s Syrian operatives now face a multitude of enemies: the regime of Bashar Assad; expeditionary forces deployed by Iran and Lebanese Hezbollah; separate aerial targeting efforts by the United States and Russia; *and* the Islamic State group. This unenviable position constitutes another puzzle in the study of al-Qa’ida’s evolution. What explains this commitment to the Qa’ida program in the midst of such a chaotic and hostile environment?

Many have described the delta between these rival organizations and their approaches. Daveed Gartenstein-Ross and fellow co-authors offered an excellent study of competition between al-Qa’ida and the Islamic State in 2015.²⁸ Thomas Joscelyn addressed the topic during testimony before the U.S. House of Representatives.²⁹ With the dramatic rise of the Islamic State organization as a distinct entity, we have seen al-Qa’ida re-define itself vis-à-vis its new rival and a vigorous jihadist discourse has emerged around the competing strategic arguments held by each camp. One amounts to a direct, *coup de main* approach to the region—building an Islamic State and a solid

²⁷ Brynjar Lia, “Understanding Jihadi Proto-States,” *Perspectives on Terrorism* 9 (2015): 30–40.

²⁸ Daveed Gartenstein-Ross et al., “Islamic State vs. Al-Qaeda: Strategic Dimensions of a Patricidal Conflict,” *New America*, December 2015, accessed December 19, 2015, <https://www.newamerica.org/international-security/islamic-state-vs-al-qaeda/>.

²⁹ Thomas Joscelyn, “US Counterterrorism Efforts in Syria: A Winning Strategy?” *Long War Journal*, September 29, 2015, accessed September 29, 2015, <http://www.longwarjournal.org/archives/2015/09/us-counterterrorism-efforts-in-syria-a-winning-strategy.php>.

military base here and now. Al-Qa'ida reiterates a more indirect approach, prescribing a protracted infiltration across the region, while questioning how long the Islamic State group can endure on its exclusive, dominating-all-comers path.

THIS PAGE INTENTIONALLY LEFT BLANK

III. A DESIGN PERSPECTIVE

Neither the marginalization nor the hybridization perspective presents a complete picture of a persistent and adaptive al-Qa'ida. Each time the organization has been assessed as all but extinct, it appears to emerge reinvigorated. Despite being subject to intensive military and intelligence pressure, al-Qa'ida has been able to rebuild its human infrastructure. Although the gathering strength perspective asserts that by certain measurements the Qa'ida organization and its allies are growing stronger, it provides little explanation for its growth. This section introduces design theory and practice, and explains the growth of the Qa'ida organization through a design lens.

A. DESIGN FUNDAMENTALS

Harold Nelson and Erik Stolterman define design as “the ability to imagine that-which-does-not-yet-exist, and to make it appear in concrete form as a new, purposeful addition to the real world.”³⁰ The process of design is exercised across sociological levels of analysis, from individuals, to organizations, to systems of states. Design is undertaken to alter anything from simple tools and physical structures to organizations, societies and entire modes of thinking about the world. When humans conceive of how they might improve an existing condition—whether vis-à-vis the natural world, a deadly disease, a hostile or competitive human group, or an oppressive power structure—the process of design is always the most effective and efficient means of getting organizations and individuals to new places.”³¹ Why is this? A design approach holds the potential to move beyond incremental alterations to existing structures toward more comprehensive and systemic overhauls.

A dynamic interplay between human agency and a changing external environment is fundamental to the design process. Designers exercise agency as they respond to and endeavor to change environmental conditions. In the design of organizations and other social structures, intended changes might be either internal or external in nature. The

³⁰ Nelson and Stolterman, *The Design Way*, 12.

³¹ Nelson and Stolterman, *The Design Way*, 5.

former pertain to how the organization is structured and how it functions, the latter to how the organization goes about impacting its environment. John Child articulated this distinction between internally and externally directed intentional changes in his 1997 model of organizational strategic adaptation. In that model, an organization's evolutionary trajectory is deconstructed into a series of *structuration* cycles or loops, each one representing a cycle of organizational reaction to, and counter-influence on, the environment. Each cycle, in turn, is sub-divided into two interconnected loops: an *inner* and *outer structuration* loop. In the inner structuration loop, an organization adapts its internal workings in response to a changing environment. In the outer structuration loop, the organization seeks to influence or re-order the external environment.³² Organizational agents engage in this cycle of intentional structuration via the design process.

The manifestation of human imagination and creativity, successful design entails the “integration of *thought* and *action*.”³³ In practice, the steps of the design process—1) discovery, 2) problem definition, 3) ideation, 4) prototyping and 5) testing³⁴—tend to overlap and intertwine as the designer engages in a trial and error interaction with an environment that is itself changing. Due to the inherent unpredictability of this process, its results tend to be *emergent* in nature.³⁵ Useful designs arise in the intersecting space between what is imaginable and executable given constrained time, resources and expertise. The design process orients toward what is unique and readily applicable to the here and now. Nelson and Stolterman refer to this bias for localized and specific action as the *ultimate particular*.³⁶ In other words, the designer strives to create and operationalize

³² John Child, “Strategic Choice in the Analysis of Action, Structure, Organizations and Environment: Retrospect and Prospect,” *Organization Studies* 18 (1997): 69–72.

³³ Nelson and Stolterman, *The Design Way*, 11.

³⁴ Nancy Roberts (Professor of Strategic Management at the Naval Postgraduate School), in discussion with the author, November 4, 2015. I refer to step one of the design process as “Discovery” in accordance with Dr. Roberts’ teaching. Note that The Institute for Design at Stanford refers to step one of the design process as “Empathize.” For detailed explanation of the Stanford Design School process, see Hasso Plattner, “An Introduction to Design Thinking PROCESS GUIDE,” *Institute for Design at Stanford*, accessed December 10, 2015, <https://dschool.stanford.edu/sandbox/groups/designresources/wiki/36873/attachments/74b3d/ModeGuideBOOTCAMP2010L.pdf?sessionID=c2bb722c7c1ad51462291013c0eeb6c47f33e564>.

³⁵ Nelson and Stolterman, *The Design Way*, 37.

³⁶ Nelson and Stolterman, *The Design Way*, 31.

that which is readily applicable and useful to a unique niche or local context. That which is too broadly or generally conceived tends to fail under unique and local demands.

1. What is Design Competence?

A design competent organization is one that is highly capable of imagining, devising and implementing changes to itself and components of its external environment. For an organization to be design competent, its leadership, internal mechanisms and culture ought to support thoroughgoing and detailed observation of its environment, healthy self-critique, and purposive adaptation to unique environmental demands over time and space. The design competent organization, then, is one that is sufficiently immersed in the workings of its external environment to recognize how its own structures and work processes need to be adapted to meet changing external demands.

Not all organizations are created alike when it comes to capacity for design and re-design. Edward Luttwak articulated this divergence in design competence among organizations when he distinguished between those military organizations whose primary purpose is *attrition* versus those whose purpose is *relational maneuver*. Luttwak described this as the distinction between “outer” and “inner-regarding” organizations. The former tend to focus on how to generate effective maneuver vis-à-vis enemy weaknesses, the latter on how to effect attrition of enemy forces or other assets. Whereas the attrition-oriented organization is inwardly focused, concerned with how to improve internal functioning to achieve a higher rate of attrition, the maneuver-oriented organization is externally focused, on how best to navigate its environment so as to get at enemy vulnerabilities.³⁷

Additionally, when an organization maintains an imbalance between thought and action—engaging in an excessive amount of thought without experimental, proofing action, or rather engaging in an excessive amount of action without sufficient observation and self-reflection—its ability to design toward the ultimate particular will be diminished. Hence, it is not only a predilection or capacity for exploration and creativity that dictates design competence, but also accessibility to venues for active experimentation. The

³⁷ Edward Luttwak, “Notes on Low Intensity Warfare,” *Parameters* (December 1983): 335–337.

organization that is capable of recognizing venues that facilitate active experimentation, and of maneuvering to those venues, is likely to see its design projects accelerated due to improved environmental feedback.

Especially given a chaotic or complex external environment, the competent organization is compelled to devote a high degree of its attention, resources and energies to *exploration*—to observing and interacting with the surrounding environment so as to encounter and *discover* opportunities for effective relational maneuver. In contrast, given a more stable and simple environment, organization theory tells us that an organization need not devote as much attention to external conditions.³⁸ Rather, priority can be placed on making internal procedures more efficient.

Having encountered, observed or discovered an opportunity, the design competent organization is one that is able to determine the potential value of that opportunity with comparative rapidity vis-à-vis enemies, competitors and other environmental elements. This might be referred to alternatively as problem definition or “opportunity definition,” and results in a decision about how to respond to said opportunity. This is analogous to John Boyd’s “Observe-Orient-Decide-Act” loop: having observed and oriented to a situation, the design agent in question must now decide and act more rapidly than his opponent.³⁹

Once a design-competent organization determines how to respond to a given situation, it commits human and material resources to exploit the identified opportunity. The competent organization recognizes the criticality of satisfying ultimate particular demands. Hence, it tends to conduct the ideation, prototyping and testing steps of the design process within a local venue or context. For the sake of contrast, that organization which is design *in-competent* tends instead to undervalue the ultimate particular and apply comparatively broad and general standards or theories to a given situation. This amounts to insufficient investment in the local and the unique.

³⁸ Henry Mintzberg, “Organization Design: Fashion or Fit?” *Harvard Business Review* (January–February 1981): 6–7.

³⁹ Daniel Ford, *A Vision So Noble: John Boyd, the OODA Loop, and America’s War on Terror* (Durham, NH: Warbird Books, 2014), Kindle edition, Location 201–404.

B. AL-QA'IDA AS A DESIGN-COMPETENT ORGANIZATION

This sub-section begins by providing a broad overview of al-Qa'ida's design competence and then proceeds with a more detailed substantiation of the argument.

The story of al-Qa'ida's evolution from 9/11 to the present is one of a highly fluent, design competent organization. Environmental conditions compelled al-Qa'ida to experiment, learn from failures and adapt in order to survive—but al-Qa'ida practitioners had to exercise intention and agency to exploit those conditions. Ideas had to be continuously operationalized to generate productive actions in an asymmetric war with the most powerful military apparatus on the planet. Proliferation of conflict across the Middle East, Asia and Africa served to multiply local venues for experimentation, adaptation and learning—venues that were exploited, in due course, by al-Qa'ida agents. This is critically important, as it underscores the concept that experimentation and proofing at the battlefield level tended to cycle faster than debate over grand strategic ideas. In fact, experimentation and proofing on the field of jihad have actually pulled higher level strategic debate along with them, guiding the path toward what was strategically possible based on what was tactically achievable.

Before proceeding with a detailed examination of al-Qa'ida's design competence, it is necessary to define and bound what we mean by “al-Qa'ida,” and to frame the study that follows. Al-Qa'ida is a jihadi-Islamist insurgent organization that inhabits a wider community of Sunni jihadi-Islamists. Founded in Pakistan and Afghanistan in the 1980s and comprised mostly of Arab volunteers, al-Qa'ida distinguished itself in the later 1990s by its advocacy for targeting the United States directly in order to break what it described as a system of hegemonic control in the Middle East. Al-Qa'ida's war against the United States was a guerrilla war—initially manifested in a series of raids and bombardments carried out against American diplomatic, military and economic targets.

Ultimately, al-Qa'ida leaders envisioned the re-imposition of an Islamic State throughout the Muslim-majority countries of the Middle East, Asia and Africa. As such, al-Qa'ida's insurgent program called for a revolutionary renovation of the entire power structure by which the Muslim-majority states were administered. Whereas other groups

pursued more narrow revolutionary objectives within the borders of particular states, al-Qa'ida proposed to strike at the overarching international system of control.

To achieve its objectives, al-Qa'ida worked in concert with allies and formed a variety of fronts and coalitions. Hence, where the Qa'ida organization itself was comparatively small, it and its allies constituted a more extensive transnational system. Over time, that system would be expanded and better integrated under—or in concert with—al-Qa'ida's central governing body.⁴⁰ This transnational system can be visualized as an *open-system* interacting with its environment.⁴¹ That environment is comprised of physical geography, a variety of states ranging from hostile to intermittently supportive, societal power structures, competitive organizations, constituents and stakeholders.

In the main, al-Qa'ida has demonstrated design competence through its 1) relatively high degree of awareness of and responsiveness to its external environment, and 2) purposive adaptation toward ultimate particular solutions within local insurgent venues. Generally speaking, the design process steps of discovery and problem definition occurred within al-Qa'ida's central governing body. The organization then determined which al-Qa'ida agents to dispatch to address an identified opportunity—or in some cases what alliances or mergers to enter into with other jihadist contingents—and what resources to allocate toward a particular venture. For al-Qa'ida and other distributed, transnational organizations, the design process steps of ideation, prototyping and testing usually occurred within the context of a local venue. The central governing body, having determined the nature of the particular opportunity and allocated human and material resources in accordance with opportunity definition, then invested authority in the local agent team—the local cell, affiliate or branch.

The local agent team, in turn, engaged in an iterative process of experimentation and trial and error interaction with its unique environment. Broad and general guidance from the organizational center was applied to the local context, as the agent team went

⁴⁰ I use the term “central governing body” throughout this study to denote al-Qa'ida's organizational strategic apex—the key leaders and managers of the transnational organization who have for the most part been located in Pakistan since 9/11.

⁴¹ David P. Hanna, *Designing Organizations for High Performance* (Reading, MA: Addison-Wesley, 1988), 9–11.

about ideating on how to achieve its insurgent objectives. The local agent team carried the center's guidance and intent to fulfillment in the form of an ultimate particular solution. In describing the local process of ideation, prototyping and testing as *iterative*, I mean that agent teams generally performed many cycles of experimentation within a particular locale—probably many more cycles of experimentation and active design than those of grand strategizing or theory-building carried out by the central governing body.

More specifically, cells, affiliates and branches experimented with variant *technologies of warfare* so as to adapt to local conditions. A technology of warfare is the socio-technical apparatus that an organization designs and employs to wage war. There are three components of this composite technology: doctrine, fighting structures and specific technologies.⁴² These are the essential elements of how an army fights, how it thinks about fighting and how it equips itself to fight. The critical epicenter of al-Qa'ida's organizational adaptation, then, lay in this redesign of technologies of warfare at the local level.

When compared to technologies of warfare, big guiding and framing strategic ideas are ever important, but they are not all important. The steady grind of insurgency making demands a more fluid, ground-level approach to selection of modes and methods of warfare. Whereas grand strategic ideas might serve as suitable guidelines or frames for the initiation of or mobilization for conflict, they are unlikely to survive the proverbial first contact with the enemy completely intact. Undoubtedly, they will be critiqued, adapted and sometimes replaced wholesale. Additionally, as battlefield encounters increase in number and intensity, the rate and extent of organizational change also tend to increase. In short, the positive and negative feedback loops driving critique and pressure to adapt organizational technologies of warfare cycle faster in time of war than the higher level loops of grand strategic thinking.

⁴² The concept of a "technology of warfare" is akin to psychologist Barry Schwartz's "technology of ideas." Schwartz described the latter as the modes, structures and devices of thinking that a society employs to imagine, organize and motivate itself. John Arquilla has articulated how such a "technology of warfare" is composed and exercised, including how doctrine, structure, technology and strategy constitute an interrelated system. See Barry Schwartz, "The way we think about work is broken," *TED* video, 8:02, March 2015, http://www.ted.com/talks/barry_schwartz_the_way_we_think_about_work_is_broken; and John Arquilla, "The New Rules of War," *Foreign Policy*, February 11, 2010, foreignpolicy.com/2010/02/11/the-new-rules-of-war/.

The Qa'ida organization also learned from the experiences of its respective local insurgent venues. Based on observations and lessons learned over time and space, al-Qa'ida leaders engaged in theory-building in order to standardize and distribute proven technologies of warfare across its transnational system. Proven arrangements were those that first satisfied ultimate particular demands. Over time, particular designs, doctrines, structures and technologies were proven useful across multiple venues. Theorizing occurred as a function of these collective observations made on a diverse array of battlefields and other local jihad venues. Theories of warfare and overarching technologies of warfare arose out of the melee, as strategists, commanders and theorists observed events unfold around them. Once proven and effectively codified, such blueprints and models were frequently exported across al-Qa'ida's transnational system. Here it is useful to note that while al-Qa'ida agents might not define themselves as designers and theorists, they are *behaving* like designers and theorists.

Over time, al-Qa'ida agents invested in promising ventures and reallocated resources away from failures. This pragmatic flexibility of mind and agility of organization—this capacity to reconfigure, repack and reposition structures, ventures and guiding ideas—are what account for the persistent re-emergence of al-Qa'ida to this day. A more robust al-Qa'ida organization has emerged from this interplay between purposive design, theory-building and an increasingly dense and fast-moving conflict environment replete with political and military opportunities ripe for exploitation. It appears, then, that certain environmental conditions—especially those that compel an organization to design in order to survive—are more conducive to design than others. It follows that those organizations that are able to recognize and exploit these conditions are likely to see their design endeavors accelerated.

1. Responding to a Chaotic Environment

Al-Qa'ida has demonstrated a high degree of responsiveness to its external environment in the following ways: 1) exploiting emergent “open front” battlefields and 2) leveraging political disorder, including exploiting political vacuums in the wake of the Arab Spring revolutions. Al-Qa'ida's central governing body primarily engaged in the

design steps of discovery and problem definition—observing, recognizing and responding to fleeting opportunities in a chaotic and unpredictable environment. Once it recognized emergent opportunities and decided to exploit them, the central body invested authority and resources in semi-autonomous teams deployed to or affiliated at the local level.

a. Exploiting Emergent Battlefields

Since 9/11, al-Qa’ida exploited emergent “open front” battlefields, and took steps to open new fronts. I define “open front” battlefields as territories that support the development of active jihadist military campaigns, whether characterized by guerrilla warfare, conventional warfare, or some combination of both. Open fronts tend to have a readily identifiable enemy target that serves as a catalyst for jihadist mobilization; they also provide sufficient sanctuary and maneuver space for jihadists to organize a campaign.

Fronts vary in degree of openness, from minimal to maximal conditions favoring the development of military campaigns: a maximal open front situation developed rapidly in Libya in 2011–2012, accelerated by foreign intervention to assist rebels seeking the overthrow of Muammar Gaddafi. In contrast, the Egyptian Sinai in the immediate aftermath of the Arab Spring was a minimally opened front—opened further after a military coup ousted Mohamed Morsi and the Muslim Brotherhood from power in 2013.

In addition to open fronts, there are covert or “closed” jihad situations, such as that which existed in Saudi Arabia in the period of 2003–2008. Closed situations are subject to effective, high-density state control, such that jihadists can only conduct low-level, desultory terrorist and guerrilla activities. Closed zones might be opened with the right combination of political opportunities, jihadist political and military action, and external support.⁴³

⁴³ One of the failures of the Syrian Jihad of 1976–1982 was arguably the narrow manner in which the Syrian Muslim Brotherhood attempted to open the front. An insubstantial political base of support allowed the state under Hafez al-Assad to crush the insurgency, despite external support provided to the latter. See Lia, *Architect of Global Jihad: The Life of Al-Qaida Strategist Abu Mus’ab Al-Suri*, 35–50.

Al-Qa'ida evolution after 9/11 is correlated with a steady proliferation of open front battlefields, a process that can be visualized in three phases. The first phase lasted from 2001 to 2005 and commenced with the dispersal of the Qa'ida organization and other jihadists out of their Afghan sanctuaries. Al-Qa'ida's organizational focus was then on survival—how to escape and evade massive U.S. military retaliation and regain momentum to resume attacks on American and allied targets. Over time, al-Qa'ida, the Afghan Taliban and other jihadists reconsolidated on Pakistani territory. Some al-Qa'ida contingents, as well as peripherally affiliated bands such as that of Abu Mus'ab al-Zarqawi, fled west to Iran, where they were either detained by the Iranian government or managed to pass through to Iraq and the Levantine Arab countries. Thus, the United States and its allies opened the jihad fronts in Afghanistan and Pakistan through military action.

In 2003, this first phase was further demarcated by the American invasion of Iraq, which reoriented jihadist attention toward the heart of the Middle East. The Iraqi front became a magnet for jihadist activity that dwarfed all others. Recognizing the centrality of this new front, al-Qa'ida leaders in Pakistan entered into an improvisational and mutually beneficial merger with Zarqawi's "Monotheism and Jihad" organization, effectively creating the first Qa'ida affiliate in 2004. Al-Qa'ida also attempted to open a jihad front in Saudi Arabia, an effort that was hard pressed to compete with the Iraqi jihad to its north, and was readily subject to effective suppression by Saudi security forces. Meanwhile in Yemen, al-Qa'ida's resident apparatus was largely dismantled by 2004, effectively closing that front for at least two years.⁴⁴

Despite tremendous setbacks in phase one, al-Qa'ida and its allies rebounded and poised for a counteroffensive. The second phase lasted from 2005 to 2011 and was characterized by al-Qa'ida's resurgence and military initiative. Existing fronts were further developed and new fronts were opened. In Afghanistan in 2006, the Taliban insurgency reemerged as a force to be reckoned with by NATO and the United States. The Qa'ida organization collaborated with the Taliban as the latter ramped up its classical

⁴⁴ Gregory Johnsen's account of al-Qa'ida in Yemen relates the fall and subsequent rise of the group in detail: Gregory D. Johnsen, *The Last Refuge: Yemen, Al-Qaeda, and America's War in Arabia* (New York, NY: W. W. Norton & Company, 2012).

jihad effort; al-Qa'ida operatives also incrementally built up their own presence on Afghan territory as the war progressed.

In Pakistan, an indigenous Taliban movement began to take shape—which also received input and investments from al-Qa'ida's governing body. By 2007, Pakistan was becoming a major open front battlefield in its own right, with militant activities spreading from the country's tribal hinterlands to its urban core. Meanwhile, in Yemen in 2006, the local al-Qa'ida branch reconstituted itself after a successful prison escape and coalesced around charismatic leaders such as Nasir al-Wuhayshi and Anwar al-Awlaki. And in Iraq, al-Qa'ida assumed a vanguard position within the Sunni insurgency, stoking a sectarian civil war and compelling the United States government to contemplate cutting its losses just three years after the removal of Saddam Hussein.

The Qa'ida organization also faced defeat in phase two. Between 2007 and 2009, its Iraq branch was decimated and driven underground, the outcome of a Sunni Arab tribal rebellion against al-Qa'ida's vanguard and a reinforced and better-integrated American counterinsurgency campaign. By 2010, the Iraqi battlefield was very nearly a closed jihad front.

The third phase lasted from 2011 to present, from the outset of the Arab Spring revolutions to the current period of intra-jihadist civil war. For al-Qa'ida, this phase was characterized by profound uncertainty, risk and yet opportunity. Democratic revolutionary movements threatened to undermine the very foundation of al-Qa'ida's program of violent jihad. However, the state counterrevolutions that ensued, as well as external interventions, acted together to open new battlefields, in Libya, Syria and the Egyptian Sinai. In Yemen, political chaos facilitated a more maximal opening of the existing jihad front.

Despite apparent delays in any meaningful response to the Arab revolutions, the Qa'ida organization gradually moved to exploit these newly opened fronts, first by dispatching operatives to prepare the ground for insurgent activities in the respective

countries.⁴⁵ It was in the course of this exploitation of post-revolution battlefields, namely in Syria, that deep divides were torn open within al-Qa'ida's transnational system. During the spring of 2013, the Islamic State of Iraq, Zarqawi's legacy organization, moved to consolidate its leadership of the twin jihad fronts in Syria and Iraq. Al-Qa'ida emir Ayman al-Zawahiri immediately contravened this claim by the Islamic State group. An escalating conflict unfolded between the Islamic State group, on the one hand, and al-Qa'ida and its Syrian rebel allies, on the other. In February 2014, al-Qa'ida's central governing body divested itself of the Islamic State group. In turn, the Islamic State group announced the re-establishment of an Islamic Caliphate, with its capital at Raqqa, in central Syria, and commenced receiving pledges of allegiance from jihadi-Islamist groups, many of which had only recently been in al-Qa'ida's orbit.

Throughout the three phases, when fronts were opened, al-Qa'ida operatives took steps to develop them, widening the battlefield and increasing maneuver-space to wage jihad. In addition to fronts opened by foreign intervention or internal revolution, al-Qa'ida actively sought new fronts that held the potential for being cracked open with the right combination of political and military action. Arriving in force inside of revolutionary Syria by 2012, Jabhat al-Nusrah positioned forces on the Lebanese border—and in 2014 made incursions into Lebanon's Bekaa Valley—in an apparent attempt to foment open front conditions inside of Lebanon.⁴⁶

In summary, open front jihad situations proliferated in the years after 9/11 for two main reasons: first, Western interventions forcibly opened new fronts; second, al-Qa'ida and its allies seized opportunities to open new jihad fronts on their own. With widespread foreign intervention in the regions spanning from South Asia through the Middle East to the African trans-Sahel, the old near and far enemy construct was effectively compressed.

⁴⁵ Thomas Joscelyn, "Al Qaeda's plan for Libya highlighted in congressional report," *Long War Journal*, September 21, 2012, accessed December 18, 2015, http://www.longwarjournal.org/archives/2012/09al_qaedas_plan_for_1.php.

⁴⁶ Encroachments on Lebanese territory predictably involved combat with Lebanese Hezbollah, an act that was sure to draw Sunni Arab attention and support, particularly after Hezbollah armed forces entered the Syrian battlefield to reinforce the Assad government in 2013. See Karen Leigh, "In Arsal, a Common Enemy Faces Hezbollah and Lebanon's Army," *Syria Deeply*, August 5, 2014, accessed December 18, 2015, <http://www.syriadeeply.org/articles/2014/08/5898/arsal-common-enemy-faces-hezbollah-lebanons-army/>.

Al-Qa'ida propaganda addressed the geopolitical mechanics behind this compression; increasingly their cause was less about simply striking the far enemy and more about conducting a system-wide revolution, dismantling the apparatus of American control whether it was encountered close at hand or far away. This system-revolutionary narrative offered an overarching framework for a changed environment.⁴⁷ American and European troops played occupying roles throughout Muslim-majority regions of the world, facilitating volunteerism in support of classical jihad frames. Calls to classical defensive jihad were traditionally stronger than calls to either engage in revolutionary action against near state regimes or strike the far enemy occupier (Israel) or system hegemon (the United States).⁴⁸ Yet calls to engage in revolutionary activities against near states were bolstered as well: the distance between regional Muslim-majority state governments and the American hegemon was dramatically shortened. Jihadist propagandists could readily point to military and intelligence liaisons between Washington, DC and Muslim-majority governments as part of a common War on Terror. In nearly every case after 9/11, the grand strategic ideas that had previously served as guiding frames for jihadi mobilization tended to converge and overlap.

b. Leveraging Political Disorder

In addition to exploiting and developing battlefields, al-Qa'ida and its allies entered political vacuums and maneuvered along political seams, seeking out contentious points that might be leveraged against enemy governments. Exploitation of political vacuums had long been described in terms of extremists gaining advantage and sanctuary within failed states and ungoverned spaces. Less anticipated was al-Qa'ida's exploitation of the political environment in the wake of the Arab Spring. From the outset of the revolutions at the close of 2010, al-Qa'ida leaders and theorists deliberated on how to

⁴⁷ Al-Qa'ida leader Adam Gadahn articulated this system-revolutionary narrative and approach in the group's South Asian periodical, *Resurgence*. See As-Sahab Media (Subcontinent), "An Exclusive Interview with Adam Yahye Gadahn," *Resurgence* (Summer 2015): 6–91.

⁴⁸ Hegghammer details this disparity in support for respective jihadist frames in the context of Saudi Arabia. See Hegghammer, *Jihad in Saudi Arabia*, 130–160.

advance their program as the situation developed.⁴⁹ Al-Qa'ida branches, affiliates and allied coalitions arose in the political chaos that ensued as regional governments fought to retain political power and territorial control.

Al-Qa'ida agents had also been attentive to exploiting political seams and other leveraging points in Muslim-majority states. By infiltrating these seams and enflaming existing societal contradictions, al-Qa'ida operatives sought to extend their organizational access within the ranks of home state security apparatuses and mobilize popular support for their insurgent efforts. For example, in 2007, the Red Mosque in Islamabad—whose leaders enjoyed longstanding ties with jihadist organizations—became a politico-religious flashpoint within Pakistan. The mosque drew increasing government scrutiny as its leadership dispatched students into surrounding communities to expose and “police” activities deemed un-Islamic. As a crisis situation mounted, there were indications that al-Qa'ida agents had actively pursued a policy of mobilizing the mosque and its student populace as a lever against the state authorities.⁵⁰

In July 2007, after a siege, security forces assaulted the mosque complex, resulting in the deaths of numerous occupants, including armed militants. This event was followed by major upticks in Pakistan's indigenous insurgency, particularly in the Waziristan tribal agencies and Swat Valley. Pakistani Taliban and other militant groups cited the Red Mosque assault as a principal motivator for engaging in revolutionary activities against the state.⁵¹

⁴⁹ This discourse surfaced in the documents seized in the American raid on Osama bin Laden's residence in Abbottabad, Pakistan, in May 2011. See Combating Terrorism Center at West Point, Harmony Document SOCOM-2012-0000010, “Letter from UBL to ‘Atiyatullah Al-Libi 2,’” accessed January 6, 2016, <https://www.ctc.usma.edu/v2/wp-content/uploads/2013/10/Letter-from-UBL-to-Atiyatullah-Al-Libi-2-Translation.pdf>.

⁵⁰ Interviews with Red Mosque leaders pointed to a lineage of collaboration with al-Qa'ida figures, including Osama bin Laden. See Rageh Omaar, “Inside the Red Mosque,” *Al Jazeera* video, June 18, 2009, <http://www.aljazeera.com/programmes/witness/2007/07/200852517384913801.html>. See also Shahzad, *Inside Al-Qaeda and the Taliban*, 38–47.

⁵¹ Qandeel Siddique, “The Red Mosque Operation and Its Impact on the Growth of the Pakistani Taliban,” *Norwegian Defense Research Establishment (FFI)*, October 8, 2008, accessed December 18, 2015, <https://www.ffi.no/no/Rapporter/08-01915.pdf>. After the siege, the Red Mosque expanded its facilities, including the establishment of a new structure entitled the Osama Bin Laden institute, housing several thousand male and female students. See Mobeen Azhar, “The School That Says Osama Bin Laden Was a Hero,” *BBC*, November 12, 2014, <http://www.bbc.com/news/magazine-30005278>.

Meanwhile, working in concert with close Pakistani jihadist allies, the Qa'ida organization pursued what appeared to be a systematic program of infiltration into the state security forces. This program consisted of not only “soft” recruitment of serving members to gain access and intelligence, but also “hard” attacks to demonstrate its level of penetration and punish the government for complicity in American counterterrorism efforts. High profile hard attacks were carried out against the Army General Headquarters in Rawalpindi in October 2009 and Pakistan Navy Base Mehran in Karachi in May 2011. Pakistani and Indian journalists reported that the latter attack—initially billed as retribution by the Pakistan Taliban organization for the killing of Osama bin Laden—was actually intended as a punitive action for an ongoing crackdown on jihadist recruits among serving naval personnel.⁵²

Later, in September 2014, al-Qa'ida claimed responsibility for a daring attempt to board and commandeer two Pakistan Navy frigates in the port of Karachi. The purported target of the attack was American shipping in the Indian Ocean; although unsuccessful, the attack further underscored a sense of al-Qa'ida's ideological penetration within the military.⁵³ Al-Qa'ida media alleged that serving members of the Pakistan Navy participated in the attack—in line with reporting surrounding the Naval Station Mehran attack.⁵⁴

Shahzad went as far as to claim that al-Qa'ida agents were actively working to align their organizational strategic objectives with those of the Pakistani state apparatus. This was not necessarily an extreme contention: such alignments certainly existed during the Afghan Jihad and Pakistani facilitation of jihadist proxies in Kashmir was well

⁵² Syed Saleem Shahzad, “Al Qaeda has warned of Pakistan strike,” *Asia Times Online*, May 27, 2011, accessed December 18, 2015, http://www.atimes.com/atimes/South_Asia/ME27Df06.html. See also Suhasini Haidar, “The Story That Killed Saleem Shahzad,” *Hindu*, June 2, 2011, accessed December 18, 2015, <http://www.thehindu.com/opinion/op-ed/the-story-that-killed-saleem-shahzad/article2071460.ece>.

⁵³ Ankit Panda, “Al Qaeda's Worrying Ability to Infiltrate the Pakistani Military,” *Diplomat*, September 18, 2014, accessed November 2, 2015, <http://thediplomat.com/2014/09/al-qaedas-worrying-ability-to-infiltrate-the-pakistani-military/>.

⁵⁴ As-Sahab Media (Subcontinent), “Operation against the American Navy by the Mujahideen.” *Resurgence*, (Fall 2014): 8–9.

documented.⁵⁵ Allegations of Pakistani state involvement in the terrorist attacks in Mumbai, India in November 2008 surfaced during subsequent investigations by the Indian and U.S. governments.⁵⁶ While the Mumbai attacks were the work of *Lashkar e Taiba*, inter-organizational coordination between al-Qa'ida and numerous Pakistani jihadi groups was by 2008 widely documented.⁵⁷

2. Adapting toward the Local Ultimate Particular

Adaptation toward ultimate particular solutions primarily occurred within insurgent locales (i.e., battlefields and other sorts of jihad fronts). Once the central governing body determined where and when to commit to local venues, local agents dominated the remainder of the design process, including ideation, prototyping and testing. Growing deep roots at the local level allowed al-Qa'ida to survive as a transnational system—it diverted hostile attention from the organizational core and developed localized ultimate particular solutions that permitted al-Qa'ida agents to retain military and political initiative. In short, the centralized terrorist organization of the pre-9/11 years evolved to become an increasingly thick and expansive carpet of locally rooted insurgencies. Over time, these local insurgencies developed transnational, intra-systemic connections. Two local branches, al-Qa'ida in Syria and al-Qa'ida in South Asia, exemplify organizational adaptation toward ultimate particular solutions.

a. Al-Qa'ida in Syria

Al-Qa'ida in Syria arose in 2011–2012 as an amalgam of two existing currents of jihadi-Islamist activity and experience. First, veterans of the 1976–1982 revolution

⁵⁵ Two very useful accounts are: Arif Jamal, *Shadow War: The Untold Story of Jihad in Kashmir* (Brooklyn, NY: Melville House, 2009) and Carlotta Gall, *The Wrong War: America in Afghanistan, 2001–2014* (New York, NY: Houghton Mifflin Harcourt, 2014).

⁵⁶ Azmat Khan, “New Evidence of Pakistan’s Role in the Mumbai Attacks,” *PBS*, June 28, 2012, accessed December 19, 2015, www.pbs.org/wgbh/frontline/article/new-evidence-of-pakistans-role-in-the-mumbai-attacks/.

⁵⁷ Carlotta Gall, “The Detail in Seymour Hersh’s Bin Laden Story That Rings True,” *The New York Times*, May 12, 2015, <http://www.nytimes.com/2015/05/12/magazine/the-detail-in-seymour-hershs-bin-laden-story-that-rings-true.html>; Carlotta Gall, Eric Schmitt, and Pir Zubair Sha, “Cellphone Offers Clues of Bin Laden’s Pakistan Ties,” *The New York Times*, June 23, 2011, <http://www.nytimes.com/2011/06/24/world/asia/24pakistan.html>; and Shahzad, *Inside Al-Qaeda and the Taliban*, 210–215.

against Hafez Assad reassembled as the new revolution against Bashar Assad gained momentum. Second, the Islamic State of Iraq—which at the outset of the contemporary Syrian revolution was still formerly acknowledged as al-Qa’ida’s branch in Iraq—deployed insurgent cadres to Syria to form a local wing of its own. Hence, al-Qa’ida in Syria was both an indigenous entity and an outgrowth of the Iraqi Jihad. It incorporated lessons learned by the Qa’ida organization writ large after the defeat of its Iraqi branch from 2007 to 2009, as well as unique, ultimate particular adaptations to the Syrian revolutionary environment.

In response to its defeat in Iraq and changing socio-political conditions related to the Arab Spring revolutions, the Qa’ida organization began to employ a more diverse array of local insurgent contingents. Concerned about the degradation of its brand name in Iraq and elsewhere, the group’s leaders mulled the option of renaming al-Qa’ida.⁵⁸ Opting against that move, it established “shadow organizations” and “false flags,” some of which operated alongside existent al-Qa’ida branches.⁵⁹ These elements were frequently deployed in a covert manner, hiding al-Qa’ida’s hand until battlefield or political conditions were more conducive to an overt posture. In addition to the fielding of shadow organizations, individual al-Qa’ida branches engaged in coalition building within their respective locales. The more diverse the jihadi battlefield, the more varied the coalition building—as respective branches designed their way toward useful ultimate particular arrangements.

In 2012, a new group emerged on the Syrian revolutionary scene: *Jabhat al-Nusrah*, “the Support Front for the People of the Levant.” This organization was readily identified and later designated by the U.S. State Department as an al-Qa’ida entity in

⁵⁸ Combating Terrorism Center at West Point, Harmony Document SOCOM-2012-0000009, “A Suggestion to Change the Name of al-Qa’ida,” accessed January 6, 2016, <https://www.ctc.usma.edu/v2/wp-content/uploads/2013/10/A-Suggestion-to-Change-the-Name-of-Al-Qa’ida-Translation.pdf>.

⁵⁹ In his writings and teaching, Abu Mus’ab al-Suri advocated a program of “shadow organizations” to achieve global jihadist and insurgent objectives; see Lia, *Architect of Global Jihad*, 229–316. For a recent example of this trend, note that on October 4, 2012, Ansar al-Sharia was designated by the U.S. State Department as an alias of al-Qa’ida in the Arabian Peninsula. See U.S. Department of State, “Individuals and Entities Designated by the State Department Under E.O. 13224,” accessed December 16, 2015, <http://www.state.gov/j/ct/rls/other/des/143210.htm>.

Syria.⁶⁰ Al-Nusrah had been committed to the Syrian battlefield by al-Qa'ida's Iraq branch—the Islamic State of Iraq. As such, the leadership of the Islamic State group regarded al-Nusrah as a subordinate division and its leader, Abu Muhammad al-Jawlani, as an Islamic State lieutenant “deputized” with the authority to act semi-independently inside of Syria. Notably, al-Nusrah's identity as an al-Qa'ida arm was not publicly or directly acknowledged among jihadist circles until the spring of 2013, when the Islamic State of Iraq openly claimed al-Nusrah as a part of its expansion to become the Islamic State of Iraq and Syria. The fact that al-Nusrah operated under a different name and initially avoided association with al-Qa'ida or the Islamic State appeared to indicate that it was part of a covert approach to entering the Syrian revolutionary scene.⁶¹

However, when the Islamic State claimed al-Nusrah, the latter balked, with Jawlani now contending that al-Nusrah constituted an independent al-Qa'ida branch with a direct subordinate relationship to Ayman al-Zawahiri.⁶² This declaration instigated an escalating conflict between al-Qa'ida proper and the Islamic State group, one that by early 2014 amounted to a full-blown intra-jihadist civil war.

Al-Nusrah embarked on a very different strategic approach to the Syrian environment than did the Islamic State group. A major facet of al-Nusrah's operations was its emphasis on coalition building and unifying jihadist ranks. From its early days, al-Nusrah operated in close coordination with another large jihadi-Islamist organization, *Ahrar al-Sham*,⁶³ an entity whose governing body was populated by long-serving al-

⁶⁰ Al-Nusrah was designated a terrorist entity by the U.S. State Department on May 14, 2014. See U.S. Department of State, “Individuals and Entities Designated by the State Department Under E.O. 13224,” accessed December 16, 2015, <http://www.state.gov/j/ct/rls/other/des/143210.htm>.

⁶¹ Thomas Joscelyn, “Al Nusrah Front leader renews allegiance to al Qaeda, rejects new name,” *Long War Journal*, April 10, 2013, accessed December 18, 2015, http://www.longwarjournal.org/archives/2013/04/al_nusrah_front_lead.php.

⁶² Why exactly Jawlani proposed—or indeed what sort of role he played in the decision—for al-Nusrah to become an al-Qa'ida branch unto itself is unclear. One explanation revolves around personal power politics: once ensconced in Syria, Jawlani saw the potential to be his own man, and seized the opportunity, angering his former superior Baghdadi. Another explanation relates to strategic choice theory: Jawlani and his cohort may have differed with their immediate superiors on how best to engage in the Syrian revolutionary environment, and acted on their differences by appealing directly to Zawahiri for guidance and backing.

⁶³ The group's full name, *Harakat Ahrar al-Sham al-Islamiyyah*, is translated as “the Islamic Movement of the Free Men of the Levant.”

Qa'ida veterans and recent participants in the Iraqi jihad. Ahrar al-Sham was one of the first insurgent organizations to take up armed resistance against the Assad regime in 2011. As the Syrian war progressed, al-Nusrah, Ahrar al-Sham and other jihadi-Islamist organizations engaged in an iterative process of coalition building, forging alliances when, where and with whom it was possible to achieve battlefield victories against the Assad government. Al-Nusrah and Ahrar al-Sham formed the core of the powerful "Army of Conquest" coalition that assembled in Idlib Governorate in early 2015 and has since gone on to present the most serious rebel threat to the Assad regime to date.

b. Al-Qa'ida in South Asia

Al-Qa'ida's South Asian branch, formally referred to as "al-Qa'ida in the Indian Subcontinent" starting in September 2014, is a manifestation of long-term adaptation to the complex jihadi environment in Pakistan. Ayman al-Zawahiri's declaration of the Indian Subcontinent branch, coming as it did in the immediate wake of Abu Bakr al-Baghdadi's declaration of a revamped Caliphate in Iraq and Syria, was widely interpreted as a competitive reaction by al-Qa'ida. This made logical sense, particularly since the component parts of what was sold as the new Subcontinent branch had already cohered in the preceding years, a process even evident during phase two of the Qa'ida post-9/11 evolution.⁶⁴

The Subcontinent branch was cobbled together from an existing coalition of South Asian jihadist organizations, several of which were longstanding al-Qa'ida allies. During his first years in Pakistan and Afghanistan, Osama bin Laden and his band of Arab volunteers forged close ties with Afghan insurgent and Pakistani proxy Jalaluddin Haqqani, as well as Pakistani jihadi formations *Harakat ul-Mujahideen* and *Harakat ul-Jihad al-Islamiyyah*. These ties were reinforced in later years, first in the late 1990s when Osama declared his Islamic Front coalition, and again after the U.S. invasion of

⁶⁴ Bill Roggio, "Al Qaeda in the Indian Subcontinent Incorporates Regional Jihadist Groups," *Long War Journal*, September 5, 2014, accessed December 18, 2015, http://www.longwarjournal.org/archives/2014/09/analysis_al_qaeda_in.php.

Afghanistan drove al-Qa'ida and Taliban forces across the Afghan frontier into Pakistan.⁶⁵

Expanding on these deeper connections, al-Qa'ida cultivated additional Pakistani allies as the organization reconsolidated after 9/11, including groups such as *Lashkar e Taiba*, *Jaish e Mohammed* and *Lashkar e Jhangvi*, many of which were part-time state proxies. Effectively, the declaration of the Subcontinent branch represented a formalization of existing inter-organizational relationships and overlapping jihad infrastructures. But, was there real substance to the announcement, or was it a calculated information operation by Zawahiri to combat the rise of the Islamic State?

The aforementioned assault on the Karachi-based Pakistani frigates in September 2014 suggested that there was substance to the announcement. More recently, in October 2015, American military authorities in Afghanistan reported carrying out a large raid in southern Kandahar Province that resulted in the killing of approximately 160 “al-Qa'ida” combatants and destruction of extensive training complexes. These facilities were described officially as belonging to “al-Qa'ida in the Indian Subcontinent.”⁶⁶ While it remains to be seen whether the Subcontinent branch is as robust as claimed, its emergence is consistent with the broader trend in al-Qa'ida organizational transformation—one of standing up new branches and integrating jihadist allies into fighting coalitions.

3. Reconfiguring al-Qa'ida's Technology of Warfare

Al-Qa'ida leaders have built theories of insurgent warfare based on observations gathered and lessons learned over time and space—from 9/11 to the present and across its transnational system of local insurgent venues. Theories are implemented via an evolving system of doctrine, one that increasingly advocates a balanced approach to insurgency in line with Maoist revolutionary guerrilla warfare. Proven technologies of warfare are

⁶⁵ Muhammad Amir Rana, Safdar Sial, and Abdul Basit, *Dynamics of Taliban Insurgency in FATA* (Islamabad, Pakistan: Pak Institute for Peace Studies, 2010), 41–96.

⁶⁶ Dan Lamothe, “‘Probably the Largest’ Al-Qaeda Training Camp Ever Destroyed in Afghanistan,” *Washington Post*, October 30, 2015, accessed December 18, 2015, <https://www.washingtonpost.com/news/checkpoint/wp/2015/10/30/probably-the-largest-al-qaeda-training-camp-ever-destroyed-in-afghanistan/>.

distributed or exported across the transnational system in the form of blueprints and models. The hallmark or centerpiece example of this process of standardization and exportation is the Fedayeen assault team. Additionally, dispersed cadre teams, shadow organizations and coalitions characterize contemporary al-Qa'ida insurgencies. Al-Qa'ida's thoroughgoing demonstration of its capacity for purposive design and collective learning indicates that it also cultivates human resources in the face of severe attrition.

Like its adaptation at the local level, Al-Qa'ida's more macro-level evolution was also characterized by trial and error learning, an apparent willingness to treat failures as opportunities to adapt, and a capacity for pragmatic self-critique. Encounters with defeat and attrition were instructive teachers, in a manner reminiscent of the Vietnamese Communist armed forces iterative learning cycle fighting the American military in the 1960s. Drawing on costly encounters with the U.S. Army and Marines in 1965 and 1966, such as the battle of the Ia Drang Valley, the People's Army of Vietnam developed its "hug the belt" doctrine, whereby Communist forces aggressively closed distance with American units to minimize the effects of powerful artillery and air-delivered fires. This theory and practice of battle with the Americans was widely replicated throughout Vietnam and proved useful long after the initial battles on which it was based.⁶⁷

a. Building Doctrine for Insurgent Warfare

Doctrine is the system of ideas that an organization uses to compile, record and convey how it envisions itself going about its work and accomplishing its objectives. Doctrine is used to educate new members and guide the decision-making, actions and behavior of often widely decentralized operational units. As an insurgent organization, al-Qa'ida's doctrine is primarily concerned with how to go about waging insurgency.

Overall, in the years since 9/11, al-Qa'ida's doctrinal thinking about insurgency tended toward improved balance between military and political action. Simply put, al-Qa'ida doctrine came to resemble the Maoist model of revolutionary guerrilla warfare

⁶⁷ Warren Wilkins, *Grab Their Belts to Fight Them: The Viet Cong's Big-Unit War Against the U.S., 1965–1966* (Annapolis, MD: Naval Institute Press, 2011), 38–39.

more closely, which was described by Bernard Fall in 1965 as a dichotomous marriage between guerrilla warfare and grassroots political action.⁶⁸

When it came to military action, al-Qa'ida military theorists and practitioners increasingly articulated a more “scientifically correct” approach to guerrilla warfare. By scientifically correct, I refer to a more calculated and gradualist approach to the use of scarce military resources in accordance with historical cases of revolutionary guerrilla warfare.⁶⁹ This shift became particularly evident in the resurgence period between 2005 and 2011. The organization, after being driven into Pakistan in 2001–2002, embarked on a process of absorbing and establishing inter-group alliances with a network of jihadists with diverse military backgrounds and experience. This network included Pakistani jihadist commanders such as Mohammad Ilyas Kashmiri, Saifullah Akhtar and Fazlur Rehman Khalil—men who were not only trained assets of the Pakistani security establishment, but also guerrilla warfare practitioners with years of experience operating in Indian-controlled Kashmir. Previously dominated by Arabs, the membership of al-Qa'ida “central” became increasingly Pakistani in its composition.⁷⁰

Mohammad Ilyas Kashmiri's story is representative of what amounted to an infusion of professionally trained jihadists into the organization. Starting his jihadist career in Afghanistan in the 1980s, Kashmiri served as a Pakistani military asset in support of the mujahideen. In the 1990s, he was re-purposed by Pakistan's Inter-Services Intelligence to organize and lead guerrilla operations inside Kashmir. Kashmiri and his *Harakat ul-Jihad al-Islamiyyah* sub-group participated in cross-border operations inside of India until 2003.⁷¹ During the period of 2005–2007, Kashmiri reportedly joined al-

⁶⁸ Bernard B. Fall, “The Theory and Practice of Insurgency and Counterinsurgency,” accessed December 18, 2015, <http://www.au.af.mil/au/awc/awcgate/navy/art5-w98.htm>.

⁶⁹ Notably, general disregard for these sorts of considerations was one of the major charges leveled at Osama and the Qa'ida organization for its escalatory campaign that led to 9/11 and the U.S. invasion of Afghanistan, particularly by pragmatic observers of past jihad efforts such as Abu Mus'ab al-Suri.

⁷⁰ The transformation of the organization's membership was reflected in the uptick in U.S. State Department designations of Pakistani citizens as global terrorists starting in about 2008. Also, see Stephen Tankel, “Going Native: The Pakistanization of Al-Qaeda,” *War on the Rocks*, October 22, 2013, accessed December 18, 2015, <http://warontherocks.com/2013/10/going-native-the-regionalization-of-al-qaeda/>.

⁷¹ U.S. Department of State, “Designations of Harakat-ul Jihad Islami (HUJI) and its Leader Mohammad Ilyas Kashmiri,” accessed December 16, 2015, <http://www.state.gov/r/pa/prs/ps/2010/08/145779.htm>.

Qa'ida, and was appointed as a commander of its operational arm in South Asia. In August 2010, Kashmiri was specially designated as a global terrorist; the following summer, he was killed in a U.S. strike in Pakistan's Federally Administered Tribal Areas. Kashmiri appears to have been a major contributor to the development of improved guerrilla warfare doctrine, and a proponent of deploying jihadist special operations teams against NATO, Afghan and Pakistani targets.⁷²

More recent al-Qa'ida literature echoed Kashmiri's line of doctrinal thinking. Al-Qa'ida's fall 2014 issue of its Subcontinent periodical *Resurgence* included an article attributed to Abu Obaida al Maqdisi, an intelligence operative who was reported killed in a U.S. strike in Pakistan in 2013.⁷³ In it, Abu Obaida offered a level of analysis framework for thinking about military overreach, commenting that guerrilla non-states are as equally susceptible to overreach as imperial states. He offered a series of criticisms and lessons, admonishing al-Qa'ida and allied practitioners not to make the mistake of overreaching in their operations.⁷⁴ Without explicitly referencing Maoist literature, the article conveyed the basic doctrinal tenets of a phased Maoist insurgency. Analysts of Vo Nguyen Giap's pattern of escalation against the French and later the Americans in Vietnam would recognize the debate over the tendencies and dangers associated with overreach.

Yet the most significant advancements in al-Qa'ida doctrine have pertained to the political action sphere of revolutionary warfare. Prior to 9/11, al-Qa'ida's thinking about insurgency was heavily weighted toward the military action sphere. Mustafa Hamid characterized the earliest inception of al-Qa'ida as fundamentally a fighting organization, grounded in a narrative about itself that arose out of the 1987 battle of Jaji against the

⁷² Syed Saleem Shahzad, who interviewed Kashmiri in 2009, claimed that Kashmiri was interested in improving the efficiency and effectiveness of al-Qa'ida's guerrilla warfare program. See Shahzad, *Inside Al-Qaeda and the Taliban*, 65–71.

⁷³ Bill Roggio, "Al Qaeda Intelligence Chief Reported Killed in Drone Strike," *Long War Journal*, April 22, 2013, accessed November 2, 2015, http://www.longwarjournal.org/archives/2013/04/al_qaeda_intelligenc.php.

⁷⁴ As-Sahab Media (Subcontinent), "Strategic Overstretch in Guerilla Warfare," *Resurgence* (Fall 2014): 106–111.

Soviet Red Army.⁷⁵ This line of thinking was perpetuated to the conclusion of the Afghan Jihad and through the 1990s, defining the group's escalatory campaign against the United States from 1998 to 2001. The notion advanced by bin Laden was that a steady barrage of raids and bombardments would inflict pain on the American hegemon, persuading it to relinquish its grip on Middle Eastern states like the Red Army before it.

Comparatively short shrift was given to a complimentary program of grassroots political action, although al-Qa'ida thinkers likely expected their guerrilla strikes to generate indirect popular appeal for the organization's agenda. Generally, political action was regarded as a narrowly applied elite activity. Bin Laden maintained a dissident radio broadcast in the Saudi Kingdom during the mid-1990s, but this was by all accounts a peripheral effort to al-Qa'ida's military training program.⁷⁶ Indeed, this organizational vacuum in the political realm was one of the main sources of criticism of al-Qa'ida by jihadi-Islamist competitors. Ayman al-Zawahiri's conception of a jihadist coup d'état incorporated aspects of mass support and targeted political action among the ranks of the military and police—but his approach failed to gain sufficient traction in the face of the Egyptian state security apparatus. Abu Mus'ab al-Suri's historical analysis of jihad placed added emphasis on this sort of infiltrating political action; if they were to succeed, jihadists required the participation of trained members of the military, police and intelligence services of respective home countries. Al-Qa'ida's energy, however, remained concentrated toward fulfillment of essentially military actions—raids, ambushes, bombardments and direct actions.

The pattern of events that followed the 9/11 raids changed this equation, as costly interactions with its opponents compelled al-Qa'ida to embrace a more fluent program of political action. Particularly after the defeat of its Iraq branch by the Sunni Awakening movement and U.S. military action, al-Qa'ida commanders and propagandists began to advocate for more comprehensive insurgent political action, with special attention paid to the retention of popular support. Criticism was leveled by the central governing body at

⁷⁵ Hamid and Farrall, *The Arabs at War in Afghanistan*, 89–105.

⁷⁶ Michael Scheuer, *Osama bin Laden* (Oxford: Oxford University Press, 2011), 93–104.

branches or allies that displayed disregard for the tenets of a balanced revolutionary guerrilla warfare, most notably the Pakistani Taliban and Islamic State of Iraq.⁷⁷

Zarqawi's al-Qa'ida in Iraq project was widely perceived as having succumbed to internal tribal rebellion due to its exclusivist politics and ruthless behavior vis-à-vis the Iraqi Sunni power structure. The American counterinsurgency campaign of 2007–2009 exploited these circumstances, reaching out to, mobilizing and leveraging Sunni manpower to switch sides and systematically gut the Qa'ida organization across Iraq. Al-Qa'ida's central leadership took note, crafting a popular support model of insurgency that was implemented in concert with the Taliban in Afghanistan starting in about 2010, and in Yemen, Libya, Syria and Mali after the "Arab Spring." Popular support remains one of the key pillars of al-Nusrah's approach in Syria. Even as al-Qa'ida's Syrian branch intermittently turned on Western supported secular-nationalist rebel groups and drove them off the battlefield, it went to great lengths to frame its actions so as to retain local support and stave off concerns about its behavior mimicking that of the Islamic State group.⁷⁸

Al-Qa'ida supplemented the popular front model with an emphasis on uniting jihadist ranks. In the case of Syria, it went further, advocating a unified front across the field of rebel groups, including secular-nationalists and Muslim Brotherhood affiliated Islamists. While the rhetoric did not always match its actions, as addressed above, al-Qa'ida's approach in Syria was remarkably inclusive, integrative and centrist, especially when contrasted with the Islamic State group.⁷⁹

To reinforce its popular front-unified ranks model, the Qa'ida organization has taken active measures to disassociate itself from allies and affiliates whose actions

⁷⁷ Combating Terrorism Center at West Point, Harmony Document SOCOM-2012-0000004, "Letter from Adam Gadahn," accessed January 6, 2016, <https://www.ctc.usma.edu/v2/wp-content/uploads/2013/10/Letter-from-Adam-Gadahn-Translation.pdf>.

⁷⁸ Jennifer Cafarella, "Jabhat al-Nusra deepens its foothold in northwestern Syria," *Institute for the Study of War*, November 10, 2014, accessed December 18, 2015, www.understandingwar.org/backgrounders/jabhat-al-nusra-deepens-its-foothold-northwestern-syria.

⁷⁹ It is noteworthy that al-Qa'ida was not nearly as interested in closing jihadi ranks prior to 9/11—in fact they vigorously competed with, and often sought to minimize, other near-peer jihadists during their stay in Afghanistan.

threaten retention of popular support. Al-Qa'ida spokesmen condemned outright the Pakistan Taliban's massacre of school children at the Pakistan Army high school in Peshawar in December 2014.⁸⁰ Also, al-Qa'ida theorists advanced the notion of "political guerrilla warfare." Observing the Arab Spring counterrevolutions, "Abdullah bin Muhammad"—an online jihadist strategist with a wide Twitter following—surmised that the Qa'ida organization might achieve its greatest successes not through armed jihad but by quietly and systematically infiltrating existing political structures.⁸¹

b. Exporting Proven Fighting Structures and Technologies

Once models, structures and techniques were proven on the battlefield, they were reproduced and exported across the system. This is not simply a function the Qa'ida organization only—as it was operating within the context of a wider jihadi field of endeavor—but al-Qa'ida was a lead horse in the team. Proofing and exportation occurred in waves that coincided with the expansion and contraction of battlefields. As the Iraq front grew rapidly after 2003, the use of the suicide piloted car bomb and the suicide bomber in general became widespread. By 2007, it had appeared in Afghanistan; soon after, it emerged in Pakistan and Somalia. The difference was not simply the use of suicide tactics but the particular way in which the tactic was used in depth.

The centerpiece addition to al-Qa'ida's repertoire of fighting structures was a modernized variant of the Vietnamese *sapper* team—commonly referred to as a "Fedayeen assault team." This fighting structure emerged in Pakistan in the second phase of al-Qa'ida's post-9/11 evolution, in 2008.⁸² The assault team built on two existing

⁸⁰ Thomas Wyke, "Al-Qaeda in Indian Subcontinent Criticises Pakistani Taliban for Peshawar School Massacre," *International Business Times*, December 20, 2014, accessed July 28, 2015, <http://www.ibtimes.co.uk/al-qaeda-indian-subcontinent-criticises-pakistani-taliban-peshawar-school-massacre-1480426>.

⁸¹ This can be variously interpreted via existing perspectives on al-Qa'ida evolution: as part and parcel to a systemic decline into the rubbish bin of history as the Islamic State emerges as the main jihadist antagonist; or, indeed, that a program of political infiltration might prove compatible and mutually supportive to an ongoing program of armed transnational insurgency. See Ali Hashem, "Al-Qaeda Theorist Calls for Infiltrating Political Systems," *Al-Monitor*, May 29, 2015, accessed December 18, 2015, <http://www.al-monitor.com/pulse/originals/2015/05/al-qaeda-political-system-infiltration.html>.

⁸² The first instance of its use in recent years appears to be the Mumbai attacks, carried out by al-Qa'ida ally Lashkar e Taiba.

tactical constructs: the suicide bomber and the infantry storm-troop team. This development was analogous to the Vietnamese Communists' development of the sapper team program during the insurgencies against the French and American occupations. In the Vietnamese case, the sapper construct was developed to achieve penetration into enemy defensive positions and inflict maximum material and psychological damage. In short, the approach amounted to an economy of force—conducting few high quality, high payoff operations, rather than a greater number of low quality, low payoff operations.⁸³

On first glance, it may appear that the design of a Fedayeen assault team is fairly simple. Take a handful of suicide bombing volunteers, hand them infantry weapons, and send them against a target. However, the pattern of jihadist actions in Pakistan, Afghanistan, Yemen, Iraq, Syria and Somalia tells a different story. One, the differentiating and truly specialized aspect of the Fedayeen assault team is that the participants are sufficiently well-trained to penetrate enemy fortifications and secured areas, and to fight as a cohesive team. When they run out of ammunition or are otherwise pinned down, they are prepared to detonate individual explosives rigs. It is the combination of high quality training and intent to sacrifice themselves that makes the socio-technological structure so potent; it confers asymmetric advantage.

Throughout al-Qa'ida's evolution, proven fighting structures and technologies that might otherwise only be considered tactical assets have been leveraged to achieve strategic effects. The best example of this is the systematic development and deployment of Fedayeen assault teams. What is otherwise a tactical asset, when applied at the right time and place, and in sufficient redundancy or density, achieves strategic impact, catapulting al-Qa'ida contingents to vanguard positions in the local insurgent ecosystem. This was the case in Syria for al-Nusrah, when in September 2012 the group conducted a sophisticated Fedayeen assault on the Syrian Army headquarters in Damascus. At the time, no other rebel groups were demonstrating this capability—including the Islamic State of Iraq, which was also operating on Syrian territory. The prominence and

⁸³ See Bernard B. Fall, *The Viet-Minh Regime: Government and Administration in the Democratic Republic of Vietnam* (New York, NY: Institute of Pacific Relations, 1956), 89; and Wilkins, *Grab Their Belts to Fight Them*, 29–32.

psychological ripple effect of such attacks confers vanguard status on those groups that have the expertise and infrastructure sufficient to field such an asset.⁸⁴

4. An Emergent Transnational System

A more robust al-Qa'ida organization has arisen from this interplay between purposive design, theory-building and an increasingly dense and fast-moving conflict environment replete with political and military opportunities ripe for exploitation. A *federated* Al-Qa'ida macro-structure—the overarching configuration of the organization across its transnational extent—has emerged over time as a result of several factors: one, the organization had to disperse and reach out to affiliates far afield in order to weather the post-9/11 storm. Two, the organization had to enter into mergers with local contingents in order to continue to register “victories” against the United States. Three, local insurgent venues grew more robust and mature over time; lessons learned at the locale were conveyed to the core, and vice versa. Connections between locale and core were formalized and strengthened over time. In due time, confusion, contradictions and disagreements over the structure and management of the federated system led to internal rebellion and intra-jihadist civil war. Meanwhile, through active experimentation and action on diverse battlefields, the Qa'ida organization's fighting structures have grown from a collection of terroristic cells to a network of small guerrilla armies.

Observing this pattern of emergence broadly, it appears that al-Qa'ida has tended to excel at redesign and adaptation in part due to the very processes of attrition and destruction that threaten its survival. This implies that perhaps design is accentuated or facilitated by conditions that not only threaten the survival of the designing agent, but also that open the way for imaginative and creative design by effectively destroying older structures.

⁸⁴ Bill Roggio, “Al Nusrah Front Claims Complex Suicide Assault on Syrian Army HQ,” *Long War Journal*, September 28, 2012, accessed November 2, 2015, http://www.longwarjournal.org/archives/2012/09/al_nusrah_front_clai_5.php.

a. A Federated Macro-Structure Emerges

Despite being effectively destroyed several times over since 2001, al-Qa'ida has undergone a metamorphosis from a small, centralized vanguard organization residing within a loose, shifting jihadist coalition into a comparatively large, federated organization with an aggregated array of allies. Even with the rise of the Islamic State group and commencement of an intra-jihadist civil war, al-Qa'ida's federation remains a major force in the jihadi-Islamist arena—evidenced by the activities of its branches in Syria, Yemen and South Asia. In a federated structure, substantial power and authority are allocated to local divisions, branches or states; often, local divisions operate with a high degree of autonomy, albeit within the overarching guidelines of the central governing body.⁸⁵

This process of federation occurred in stages, mirroring the phases of al-Qa'ida's evolution described above. It started with a loose coalition and progressed to a rudimentary federation born out of post-9/11 improvisation. Over time, the early federation was made more robust; ties between the central governing body and local branches were strengthened and formalized. The organization underwent iterative cycles of decentralization and integration. Especially after the “Arab Spring,” local branches expanded their own sub-structures, resulting in the creation of al-Qa'ida front organizations and new coalitions.

Prior to 9/11, al-Qa'ida was one of many small to middling jihadist bands lurking in the margins of the Arab-Muslim system of states.⁸⁶ Osama bin Laden and his organization, perhaps 100 or fewer members at the time, came to distinguish itself in the mid-1990s by advancing a notion of direct strikes on the United States intended to challenge its hegemonic role in the Middle East. While the official membership of al-Qa'ida in particular remained relatively small throughout the 1990s, it existed within a deeper pool of Arab pan-Islamists and global jihadists who had experience fighting in or

⁸⁵ For further explanation of a federated structure see: Patti Anklam, *Net Work: A Practical Guide to Creating and Sustaining Networks at Work and in the World* (Burlington, MA: Elsevier, 2007), 67–68.

⁸⁶ Al-Qa'ida arose out of the Afghan-Arab community that coalesced during the classical jihad against the Soviet occupation of Afghanistan in the 1980s. After the jihad, that community dispersed, some contingents pursuing revolutionary causes in their home countries—such as Egypt and Algeria.

organizing in support of the Afghan Jihad.⁸⁷ Additionally, during and after the Afghan Jihad, al-Qa'ida and other predominately Arab organizations forged close working ties with a variety of Pakistani and Central Asian jihad groups.

In 1998, bin Laden embarked on an escalatory campaign of guerrilla raids and terrorist bombardments against American targets. Publicity generated by these attacks, in addition to organizational joins and mergers by jihadi-revolutionary contingents whose home state campaigns failed, boosted al-Qa'ida's membership in the years before 9/11.⁸⁸ Meanwhile, Osama bin Laden announced a so-called "Worldwide Islamic Front." This front construct—a loose coalition—included an array of Arab and Asian jihadist organizations and foreshadowed the more formalized structures that ensued, especially in Pakistan.

Why did al-Qa'ida, a relatively small terroristic organization at its outset, undergo a process of federation in the face of the post-9/11 U.S. military onslaught? The impetus for this transformation was foremost an issue of survival: if the organization did not disperse and reach out to allies and affiliates far afield, it would cease to exist—or at least cease to be politically relevant in a revolutionary sense. Second, it was an issue of comradeship and jihadi unity: although many vigorously disagreed with Osama bin Laden's calculus for the 9/11 raids, they generally banded together in the face of the American onslaught.

To exploit the emergent jihad arena in occupied Iraq, al-Qa'ida acquired Abu Mus'ab al-Zarqawi's *Jama'at al Tawhid wal Jihad* in 2004. This move effectively laid the groundwork for the federated organizational structure that was to follow. In that sense, federation was a logical, natural progression for an insurgent organization that had to put victories on the board in its running war with the United States. In order to strike back, al-Qa'ida had to decentralize to achieve freedom of maneuver, and to do that, it had

⁸⁷ Mustafa Hamid, himself an Arab volunteer in the Afghan Jihad, relates the origins of al-Qa'ida in detail, including its politics and competition with other Arab jihadist contingents. See Mustafa Hamid and Leah Farrall, *The Arabs at War in Afghanistan* (London: Hurst, 2015), 65–143.

⁸⁸ Including a faction of Ayman al-Zawahiri's Egyptian *al-Jihad*. See Montasser Al-Zayyat, *The Road to Al-Qaeda: The Story of Bin Laden's Right-Hand Man*, trans. by Ahmed Fekry and Sara Nimis (London: Pluto Press, 2004), 71.

to empower local commanders like Zarqawi—despite baseline ideological-strategic differences that he and al-Qa’ida’s key leaders maintained.

The process of federation continued apace with the addition of al-Qa’ida in the Islamic Maghreb in 2005, al-Qa’ida in the Arabian Peninsula between 2006 and 2011, and Somali al-Shabaab between 2009 and 2012. In addition to formalized mergers, political-military investments were made in close allies, including the Pakistani Taliban and other elements of the South and Central Asian jihadist community.

The nature of the relationships that al-Qa’ida’s governing body held with its respective regional divisions varied, across locations and over time—as befitted a federated structure. Local chapters usually started as *affiliates*, and developed to become *branches*. In other words, federation was a two-way street: al-Qa’ida needed locally generated pledges of allegiance to advance its cause and spread its brand; once an affiliate came on board, infusions of expertise and sometimes resources from al-Qa’ida “central” tended to formalize the relationship over time.⁸⁹ This arrangement did not go as intended by al-Qa’ida leadership in the case of its Iraq branch—the latter became increasingly insubordinate as it exercised local power.⁹⁰ In federating, the Qa’ida organization had a cost-benefit analysis to make: in order for local chapters to be successful, they had to be allocated autonomy; with too much autonomy, and local success, they tended to challenge the Qa’ida core’s organizational hegemony.

b. Macro-level Evolution and Maturation of Fighting Structures

From a bird’s eye view, the repertoire of al-Qa’ida’s fighting structures has shifted from one oriented on fleeting terrorist raids and bombardments to one of increasingly densely populated and networked guerrilla battle-zones. In short, it shifted from the actions of small terrorist bands to those of fledging guerrilla armies. On closer examination, a set of overarching themes emerges. First, fighting unit structures and the apparatuses that support them have on average grown in size and number. Second,

⁸⁹ Joscelyn, “US Counterterrorism Efforts in Syria.”

⁹⁰ It might be argued that disagreements and confusion generated over the issue of organizational centralization led to the Islamic State group rebellion of 2013–2014.

fighting structures have undergone specialization of combat tasks, albeit at the small unit level. Third, these specialized fighting units have been widely standardized across the federated organization. This is a story of maturing and regularizing fighting structures, which we can contextualize, in part, by consulting examples of historical insurgencies, such as the Viet Minh and Zionist insurgencies.

(1) Growth in the Size and Number of Fighting Structures across the Transnational System

Most insurgencies start out at the level of small cells and squads. As they gather fighting strength in the form of new volunteers, weapons and equipment, and prepared bases, they trend toward a critical mass or density at which point they might be described as an army. This progression might be sub-divided into four simple levels, each denoting a capacity to train, field and reconstitute a given size of unit: 1) cells and squads; 2) platoons and companies; 3) battalions, regiments and brigades; and 4) divisions, corps and fronts.⁹¹

In the case of al-Qa'ida, it spent the duration of its pre-9/11 lifespan in the realm of cells and squads. Osama's organization in the early 1990s was reportedly comprised of only about 150 members. Even when the organization trained what has been estimated as many thousands of volunteers at its Afghanistan camps between 1996 and 2001, the core membership of al-Qa'ida at that time probably never exceeded several hundred.⁹²

The U.S. invasion served to aggregate the existing composite of jihadists. Comparatively large numbers of jihadists clustered around routed al-Qa'ida elements in the Pakistani tribal areas during the period of 2001–2002. These consisted of ousted Afghan Taliban, nascent Pakistani Taliban contingents, and a variety of other Pakistani and Central Asian jihadist organizations. But this was a loose, ad hoc coalition of

⁹¹ Historically speaking, a critical mass is achieved at about the point when an insurgency develops the capacity to train, field and reconstitute fighting battalions—approximately several hundred to a thousand or so combatants in each designated unit.

⁹² If one factors in the entirety of the Afghan-Arab jihadi community inhabiting Afghanistan, plus the Central Asian and Pakistani jihadist organizations based there, we might arrive at a composite number of about several thousand. This includes the combat units (such as the 055 Brigade) which al-Qa'ida leadership committed to the Taliban's active battlefield with the Northern Alliance.

jihadists that did not necessarily have the capacity to fill out and deploy cohesive fighting structures.

Between about 2005 and 2011, al-Qa'ida agents established a new array of fighting units designed to carry out operations in Pakistan and Afghanistan. Intensification of the wars in Pakistan and Afghanistan facilitated this process by stimulating indigenous and foreign jihadi volunteerism. Expansion of open, active battlefronts inside of Pakistan created large internally displaced populations and caused widespread devastation in rural communities. Urban communities were affected as well: as the Pakistani Army ventured into the hinterlands, the insurgents forayed in to the densely settled interior and urban core. These conditions proved to be fertile recruitment grounds for the expansion of al-Qa'ida and its regional coalition. Thus, by about 2007, the Qa'ida organization was beginning to field, support and regenerate platoon to company-sized units on either side of the Pakistan-Afghanistan border.⁹³

Meanwhile, Zarqawi's small—and then unaffiliated—organization carried out a preparation of the battlefield in Iraq, Syria, Lebanon and Jordan in 2002, and was advantageously positioned to contest the U.S. occupation of Iraq by mid to late 2003. By 2004–2005, Zarqawi's organization was sufficiently embedded within the Iraqi insurgency to be able to field fighting units at the platoon and company size. The height of al-Qa'ida in Iraq's fighting power occurred in 2006–2007. In Saudi Arabia from 2003 to 2008, al-Qa'ida in the Arabian Peninsula embarked on a widespread but ultimately failed campaign of raids and bombardments. Subject to systematic infiltration and pursuit by elements of the Saudi security establishment, this campaign appears to have never exceeded the scale of cells and squads.⁹⁴

By 2008–2009, if one were to compare al-Qa'ida's branches in Iraq, Saudi Arabia and North Africa with al-Qa'ida "central" in Pakistan-Afghanistan, the latter was fairing

⁹³ Bill Roggio and Patrick Megahan, "ISAF raids against al Qaeda and allies in Afghanistan 2007–2013," *Long War Journal*, May 30, 2014, accessed December 18, 2015, <https://www.google.com/maps/d/viewer?mid=zDzQXfEc6tT8.k2WqMgZCpMZY&hl=en>.

⁹⁴ In 2006, an al-Qa'ida cell engaged security forces at the Abqaiq refinery and in 2007–2008, Saudi authorities reportedly foiled a plot to hijack airliners and use them to strike oil infrastructure targets. See Ali Al-Ahmed, Andrew Bond, and Daniel Morillo, *Security Threats to Saudi Arabia's Oil Infrastructure* (Washington, DC: Institute for Gulf Affairs, 2013), 15–18.

comparatively well. By 2011, internal communications between al-Qa'ida administrators made reference to multiple al-Qa'ida "companies" in Pakistan.⁹⁵ Moreover, the scale of attacks in Pakistan and Afghanistan implied specialized platoon to company-sized fighting structures.⁹⁶ Yet Pakistan remained a constrained open battlefield: the absence of direct Western intervention, effective Pakistani state internal defense measures, and perhaps a desire to refrain from system-wide conflict prevented the open-ended growth of al-Qa'ida's fighting structures.

The chaos in the wake of the Arab Spring revolutions and counterrevolutions, however, presented just the sort of opportunity to expand above the level of company- and battalion-sized operations. Since its official entry into the Syrian war in 2012, al-Nusrah has progressively increased the size and extent of its fighting formations—partly through its capacity, along with allies like Ahrar al-Sham, to bring together jihadist-rebel coalitions.

(2) Specialization of Combat Tasks and Technologies across the Transnational System

As units grew in size and engaged in various modes of combat, they specialized, developing combined arms sub-structures. This was a natural process of development; a light infantry unit cannot hope to progress in capability without developing a simple division of combat labor. Prior to 9/11, al-Qa'ida developed three sorts of specialized fighting structures: terrorist teams, light infantry units and advisor-trainer cadre teams. The bulk of volunteers who passed through al-Qa'ida training camps received instruction on guerrilla light infantry tactics and techniques. Some of these went on to fight in various capacities as guerrilla light infantry, either in Afghanistan in support of the Taliban, or in overseas jihadi endeavors such as in Bosnia or Chechnya.

⁹⁵ Combating Terrorism Center at West Point, Harmony Document SOCOM-2012-0000007, "Letter to Hakimullah Mahsud," accessed January 6, 2016, <https://www.ctc.usma.edu/v2/wp-content/uploads/2013/10/Letter-to-Hakimullah-Mahsud-Translation.pdf>.

⁹⁶ These attacks included the assault on Pakistani Naval Station Mehran in Karachi and others, resulting in destruction of two multiengine reconnaissance aircraft and an extended siege.

Certain volunteers were chosen for more advanced training in terrorist tactics and techniques—operations carried out in closed, non-permissive environments where the local state authorities and security services enjoyed a high degree of control. The teams that carried out the 9/11 terrorist raids would fit this mode of specialization—a high degree of specialization toward one focused objective, boarding American civilian airliners, seizing control of the aircraft and piloting them into urban targets. Because of the inherent high degree of specialization and one-off nature of this sort of attack, the organization was unlikely to duplicate this sort of training and preparation in great quantities.

Since 9/11, the Qa'ida organization expanded on the existing specialized structures, by increasing the size of the light infantry forces across the various local branches, and building new support infrastructures to generate additional forces. Similar to the prior system of training larger numbers of volunteers than were necessarily formally brought into al-Qa'ida as credentialed members, the organization leaned on allied organizations to form the bulk of the jihadist fighting forces in Pakistan and elsewhere.

The third sort of specialized structure developed in the pre-9/11 timeframe was the advisor-trainer cadre team. The basis of the team was simple: a grouping of well-trained instructors who could travel to distant locations to organize and train larger indigenous forces. More recently, local branches such as al-Nusrah have deployed a proven model for dispersion of cadre-teams across complex insurgent battlefields. Cadre-teams became the kernel of expertise at the center of larger units—such as combined arms formations now being employed in Syria. These structures emerged after the conflict environment was fully opened—when rebels enjoyed relative freedom of maneuver and large stores of government weaponry were overrun. Such developments pushed jihadist formations across the battalion-brigade threshold, allowing combatants to field an array of heavy weaponry in concert with light infantry, “kamikaze” attacks and Fedayeen teams.⁹⁷ Al-Nusrah’s ability to position itself in the vanguard of the Syrian

⁹⁷ This structure emerged most dramatically in the case of the Islamic State of Iraq and Syria, but it emerged first in Libya, advanced by loosely Qa'ida affiliated fronts such as Ansar al Sharia.

revolution from 2012 onward corresponded with its military prowess, including expertise accumulated Pakistan, Afghanistan and Iraq. The organizational capacity to generate standardization across units in different regions, and to re-field new units, implies a depth and breadth of structural robustness that is leaps and bounds beyond al-Qa'ida of 2001.

c. Innovate or Die

Al-Qa'ida appears to excel at design in part due to the very processes of hostile attrition and destruction that threaten its survival. Effectively, a renovated al-Qa'ida has tended to re-emerge in successive waves over time, as its structures are continuously destroyed and made anew with the lessons of respective defeats incorporated in new designs. This implies that the process of design is accentuated or facilitated by conditions that not only threaten the survival of the designing agent, but also that open the way for imaginative and broadly systemic designs by eliminating older structures. It may be that al-Qa'ida agents, operating under these “survivalist” conditions, actually have fewer constraining structures and entrenched interests to contend with.

In other words, organizations that are capable of operating at this radical edge, of riding a chaotic and violent process of emergent conflict, are likely to find the conditions are conducive to design. Such organizations recognize that if they become static or sluggish in their process of active redesign, they risk being crushed by enemy action or ruthless competitors. This high stakes reality incentivizes organizational investment in high risk, high payoff ventures. Al-Qa'ida agents invest, allocate and reallocate resources toward ventures that show particular promise. To be sure, their investments and allocations do not always meet with success. Attempts to open a jihad front in Saudi Arabia—which were likely costly in terms of manpower and money—were ultimately met with failure. To the extent that al-Qa'ida “central” invested directly in Zarqawi's Iraq venture, that project actually may have done more to hurt the organization and its brand than to advance it.

That the success rate was less than perfect does not diminish the emphasis on fluidity of investment within the transnational system and recognition of the need to exploit and reinforce success. As the Iraq front collapsed after 2008, it appears that some

jihadists relocated to South Asia, where they were reengaged in operations against the American coalition in Afghanistan, or against the Pakistan Army on the other side of the border.⁹⁸ Later, when the United States escalated its aerial campaign against al-Qa'ida in the Federally Administered Tribal Areas, Osama bin Laden directed a relocation of human and material infrastructure to especially mountainous and remote areas of Afghanistan.⁹⁹ In 2011 and 2012, with the rapid expansion of the open jihad battlefield in Syria, that country became the new *schwerepunkt* for international jihadist activity. The Qa'ida organization in Pakistan reportedly shifted significant numbers of combatants and trainers to the Syrian theater; many of these al-Qa'ida operatives were designated by the United States as the "Khorasan Group" in 2014 and subjected to aerial targeting along with the Islamic State group.¹⁰⁰

This is not to say that competent organizations will always be able to design their way out of a given "survivalist" situation. Provided the situation is dire enough, and their enemy's actions effective enough, they will still succumb. But to the extent that they are able to outmaneuver a more ponderous enemy despite attrition and defeat, and to the extent that their program enjoys relatively widespread and transnationally distributed appeal, they are likely to persist and even grow stronger over time.

⁹⁸ Atwan, *After Bin Laden*, 32–33.

⁹⁹ Combating Terrorism Center at West Point, Harmony Document SOCOM-2012-0000015, "Letter from UBL to 'Atiyatullah Al-Libi 3,'" accessed January 6, 2016, <https://www.ctc.usma.edu/v2/wp-content/uploads/2013/10/Letter-from-UBL-to-Atiyatullah-Al-Libi-3-Translation1.pdf>.

¹⁰⁰ Eric Schmitt, "Leader of Qaeda cell in Syria, Muhsin al-Fadhli, Is Killed in Airstrike, U.S. Says," *New York Times*, July 21, 2015, http://www.nytimes.com/2015/07/22/world/middleeast/leader-of-qaeda-cell-in-syria-muhsin-al-fadhli-is-killed-in-airstrike-us-says.html?_r=0. That there is active and fluid transmission of human and material resources between various hubs or jihad fronts within the network is also evidenced in the publicized organizational chains of command. Nasir al-Wuhayshi, emir of al-Qa'ida in the Arabian Peninsula from 2006 to his death at the hands of the U.S. in 2015, was publicly identified as being al-Qa'ida's general manager and the chosen successor for Ayman al-Zawahiri. See Bill Roggio and Thomas Joscelyn, "AQAP's emir also serves as al Qaeda's general manager," *Long War Journal*, August 6, 2013, accessed December 18, 2015, http://www.longwarjournal.org/archives/2013/08/aqap_emir_also_serve.php.

THIS PAGE INTENTIONALLY LEFT BLANK

IV. IMPLICATIONS

A. THE AL-QA'IDA ENTERPRISE IN A JIHADI MARKET

The Qa'ida organization inhabits a wider jihadi-Islamist insurgent market, in which the principle commodities are variant technologies of insurgent warfare. According to Merriam-Webster dictionary, a market is “a geographic area of demand for commodities or services; in that economic space “buyers and sellers come together and the forces of supply and demand affect prices.”¹⁰¹ The jihadi-Islamist insurgent community functions as a market: proven technologies of insurgent warfare, including doctrinal models, fighting structures, specific technologies and human expertise, are sought after and exchanged after being generated by particular organizations, or constituent groups, within the community.

For almost a decade-and-a-half, the Qa'ida organization has served as the vanguard of a team of jihadist organizations populating this market system. In the main, al-Qa'ida managed to lead the market system primarily through its capacity to design viable or useful technologies of warfare—technologies, constructs and ideas that others within the community recognized as useful, regardless of disagreements over ideology or grand strategy. Over time, and with the increasing density of conflict, the market has grown increasingly expansive, energetic and competitive. The jihadi-Islamist insurgency market of 2015 dwarfs that of 2001.

By an increasingly expansive market, I mean that the market has grown in spatial extent, and that it has grown in density as well. Not only are there are a greater number of participants, engaging in a greater number of jihadi venues or hubs of activity, but there are also a greater number of connections between participants in the market. The market is growing more diverse in its membership, as new and different participants enter the market and contribute to it.

By an increasingly energetic market, I mean that the rate of exchange within the market has increased. Active fronts and other jihad ventures constitute hubs of activity in

¹⁰¹ *Merriam-Webster Dictionary*, s.v., “market.”

the jihadi market. As they multiple and interact at an accelerating rate, connections grow more developed and the constituent organizations mature, or grow in capacity. Put otherwise, participant organizations are maturing and learning, growing more sophisticated in nature.

By an increasingly competitive market, I mean that the scale of competition between participants has increased. The complexity of the market is multi-level and multi-organizational in nature. This applies to both inside and outside of the Qa'ida organization. Allies have competed with al-Qa'ida, and internal branches and affiliates have competed with each other. Competition has taken the form of friendly interaction as well as more hostile competition, including open warfare after 2013–2014. Yet, as the prospect of jihadist “victory”—for example in Syria, by a collection of jihadist rebels—becomes more tangible over time, the stakes for participation become greater, as well as the incentive to invest further. Also, the relative power and maturity of constituent organizations has gone up over time, raising the level of competition in a similar manner to the intensified competition between professional sports teams.

Competition is therefore both destructive and productive: it leads to fragmentation, as factions sheer off of participant organizations, as well as to collective advancement as rival organizations learn from each other's successes and failures. This applies, again, to events both within and without of al-Qa'ida over the last fourteen years. Another way to put this is that there is collective convergence onto useful constructs and ways of waging insurgency. In particular locales or hubs within the market, participants design toward ultimate particular constructs in order to meet local demands. As these constructs are proven useful, they are often distributed across the wider market.

B. A COMPLEX ADAPTIVE SYSTEM

Another way to look at the evolving field of jihadi-Islamist insurgency is to treat it as one sort of complex adaptive social system. Complex adaptive systems “are characterized by apparently complex behaviors that emerge as a result of often nonlinear spatio-temporal interactions among a large number of component systems at different

levels of organization.”¹⁰² Furthermore, these are “dynamic systems able to adapt *in* and evolve *with* a changing environment.”¹⁰³ In short, complex adaptive systems are those that display co-evolution, self-organization, adaptation and emergence. As explained by John H. Miller and Scott E. Page in *Complex Adaptive Systems: An Introduction to Computations Models of Social Life*, “we find robust patterns of organization and activity in systems that have no central control or authority.”¹⁰⁴ While there is certainly a degree of central control in al-Qa’ida’s transnational system, the broader field of jihadi-Islamist insurgency contains a diverse array of competitors, over which there is no central governing body. In the absence of central authority, an adaptive system that becomes complex tends to exhibit self-organization. Miller and Page describe this critical concept as follows: “The behavior of many complex systems emerges from the activities of lower-level components. Typically, this emergence is the result of a very powerful organizing force that can overcome a variety of changes to the lower-level components.”¹⁰⁵

The Qa’ida organization might be described as one component of a complex adaptive social system that is the jihadi-Islamist insurgency movement. The system includes a variety of components, some of which are allies of al-Qa’ida, while others are competitors, intermittent state supporters and lethal enemies. As al-Qa’ida grew stronger since 9/11, it did so within a broader context of an increasingly complex and robust system of Sunni jihadi-Islamism.

Throughout this complex adaptive insurgent system, there are cores and peripheries of insurgent activity. In Syria and Iraq today, the Islamic State appears to be a core of activity, whereas al-Nusrah and its allies operate on the former’s periphery. In Pakistan, in contrast, the Islamic State remains on the periphery, while al-Qa’ida and its

¹⁰² Serena Chan, “Complex Adaptive Systems,” Paper presented at the ESD.83 Research Seminar in Engineering Systems, Massachusetts Institute of Technology, Cambridge, Massachusetts, October 31–November 6, 2001.

¹⁰³ Serena Chan, “Complex Adaptive Systems.”

¹⁰⁴ John H. Miller and Scott E. Page, *Complex Adaptive Systems: An Introduction to Computations Models of Social Life* (Princeton, NJ: Princeton University Press, 2007), 5.

¹⁰⁵ Miller and Page, *Complex Adaptive Systems*, 9.

allies occupy the core. There are reciprocal relationships between core and periphery. Cores have more productive power, but new ideas are often generated or inspired at the periphery. Yet, the most important aspect to keep in mind is that there is an exchange, interplay or power dynamic between core and periphery. In this way, al-Nusrah applies its own doctrinal approach to the insurgency in Syria, but must constantly adjust its program according to the Islamic State. If it fails to adjust adequately, it risks significant portions of its membership defecting to the Islamic State, as occurred in years past. Likewise, the Islamic State can observe and learn from the methodologies employed by al-Nusrah; it need not be solely domineering in its approach—it might also infiltrate and use some Syrian rebels as false fronts.

The Islamic State group is the beneficiary of al-Qa'ida's pioneering design—for better or worse. It has simply crossed a threshold in terms of density of operating space, resources, assets and manpower. It has grabbed hold of sufficient space and quantities of state infrastructure that it appears more like a state than a transnational network organization. Yet even as the Islamic State consolidated territory, resources and power in 2013–2015, al-Qa'ida's system continued to evolve—with respect to its enemies as well as to its principle competitor. Al-Qa'ida ventures persist, to date, in the face of a relatively more powerful Islamic State rival, because al-Qa'ida agents continue to redesign in an increasingly complex jihadi system.

C. THE EARLY STAGES OF STATE FORMATION

Taking implications one step further, the evolution of the Qa'ida organization and its jihadist allies in the years after 9/11 is analogous to the earliest stages of state formation, or state reformation. By engaging in a creeping conflict with non-states, the United States and its allies are making states of them, as organizations grow in maturity and capacity over time. Still seeking “terrorist” non-state actors, the United States increasingly finds fledgling states to contend with, as jihadist insurgencies transform themselves into emirates and proto-states tied to territory and infrastructure. It is not that this is a new phenomenon—the culmination of the Afghan Jihad birthed the Taliban—but

that the creation of state-like entities today is occurring on a wider scale and in a more interconnected fashion than in the 1990s.

In his *Coercion, Capital, and European States, AD 990–1992*, Charles Tilly contended that variant combinations of state war-making and capital accumulation created the modern European system of national bureaucratic states. On a sub-state, organizational level, al-Qa’ida and allied groups, both prior to and concurrently with the self-declared Islamic State, have been honing their organizational capabilities and developing proto-state-like characteristics in territories subject to jihadist-insurgent control. Whereas “war makes states and states make war,” in this case jihadist organizations make insurgency and insurgency makes more robust organizations.¹⁰⁶

So why is this occurring—why do we see the creation of stronger jihadi-Islamist organizations that are increasingly contesting and rooting themselves in physical territory? There are several explanations, which complement one another: one, the United States’ War on Terror and “overseas contingency operations” have facilitated the emergence of an increasingly dense conflict environment conducive to the growth of a stateless insurgency. Why—because Western and regional militaries opened an array of battlefields, none of which was ever truly closed. They remain active venues for jihadist adaptation and redesign.

Yet, if this is the case, why do some insurgencies move toward state formation and others not? Is it too simplistic to suggest that insurgencies under duress progress naturally toward development of state-like structures? The results of this examination indicate that insurgent success is correlated with the expansive capacity of the insurgent project. In other words, how likely is the insurgent project to be able to expand beyond the borders of one state—to expand its appeal from the local level to transnational and even international level? This potential for expansion pertains both to the military and political components of the insurgency—as one might be more capable than the other when it comes to expansive potential. Additionally, the expansive potential operates in relation to geographic space and the relative power of the counterinsurgency effort.

¹⁰⁶ Tilly, *Coercion, Capital and European States*, 67–95.

In the case of the American and Vietnamese national liberation insurgencies, the insurgent efforts were sufficiently expansive within the scope of their geographic space. In other words, the insurgent project resonated with a sufficiently wide slice of the population across the space in question, and the military component of the insurgency was applied across each of the respective geographic spaces. When counterinsurgent efforts were escalated in particular subsets of the geographic space, the insurgency relocated to other subsets or reprioritized its area of focus. For example, the insurgency shifted from the northern colonies to the southern colonies in the American war of independence. The more politically compartmented the geographic space—from the perspective of the counterinsurgent—the more likely the counterinsurgent effort is unduly divided, not sufficiently cohesive, allowing the insurgent maneuver space, or gaps and seams to maneuver into and along. Furthermore, the more diverse the insurgency (i.e., the more each subcomponent tends toward a useful ultimate particular in a given locale) the more difficult the job of the counterinsurgent.

This translates to a corollary implication: for insurgents, the cost-benefit equation associated with conflict is different than that for states. When states engage in war, they necessarily take big risks. Insurgents take big risks too, but their ability to grow is predicated on their ability to exploit conflict zones and chaotic political situations. The more extensive the conflict and chaos, the more they stand a chance to be able to crack open the state apparatus and prey on it, eroding its strengths and actually nourishing the insurgency itself.

Two, external support tends to spur on the insurgency, particularly when a chaotic political environment incentivizes external state players to employ insurgents as proxies. Syria is an exemplary case in point, yet contemporary Afghanistan is not far behind, and Iraq as well. There are multiple parties to the Syrian conflict, many of whom support in overt or covert ways the various jihadi-Islamist groups arrayed against the Assad government. And in Iraq during the U.S. occupation of 2003–2011, the Assad

government indirectly facilitated the Iraqi insurgency, including elements of al-Qa'ida in Iraq, in its aims—a venture that blew back on the Assad state from 2011 onward.¹⁰⁷

External support is related to the level of complexity in the wider geopolitical system—in other words, the more complex and dynamic the wider system, the more likely external players will be to want to pursue their own objectives by proxy inside of an insurgency space. Likewise, if external players, including an external counterinsurgent, have a long list of priorities, within which the particular case of insurgency sits near the bottom, the counterinsurgent is unlikely to be able to devote sufficient attention and resources toward the insurgency. In short, the counterinsurgent's degree of commitment is tied to its strategic priority list. Other higher priorities tend to diminish the degree of commitment toward fulfillment of the particular insurgency effort. This pertained to the British counterinsurgent effort against the Zionist insurgency in the post-WWII years. It pertains, as well, to the United States vis-à-vis the contemporary Middle East, where a host of flashpoints and conflicting interests militate against a consistent application of counterinsurgent policy toward al-Qa'ida and its jihadi-Islamist allies. Even on comparatively narrow fronts of the wider war—such as in Pakistan—it is not so easy for the United States to pursue a consistent policy toward Pakistan, a state in whose interest it is to support certain jihadists while targeting others in a shifting game.

Of course, this is in no way new: jihadi-Islamist groups active in Syria in 1976–1982 were supported by Egypt and Iraq¹⁰⁸; external support to the Afghan mujahideen was siphoned by Pakistan, and sub-state entities, to fuel an extensive jihadist infrastructure for future activities in Kashmir and other efforts against India; and Imperial Germany facilitated the return of the Bolshevik party to Tsarist Russia in the midst of the First World War.

And three, open-system structures subject to stress, strain and exercise tend to accommodate the stress unless they are broken completely. Take for example the case of a state and its war-making capacity—Nazi Germany in the Second World War. The

¹⁰⁷ Ryan Mauro, “Has Damascus Stopped Supporting Terrorists?” *Middle East Quarterly* 16 (2009): 61–67.

¹⁰⁸ Lia, *Architect of Global Jihad*, 35–50.

German war economy was at its most robust in 1944, at the height of the Allied strategic bombing campaign. Likewise, whereas the *Waffen SS* started the war as a tiny praetorian guard for Adolf Hitler, by 1944 it attained a fighting strength of over 600,000 personnel, including considerable numbers of Slavs and Muslims.¹⁰⁹ These structures were dramatically redesigned to accommodate profound duress.

It is likely that insurgencies subject to duress move toward a threshold or tipping point beyond which they are relatively robust as opposed to relatively brittle. Whereas al-Qa'ida in 2001 was arguably relatively brittle, its capacity to expand—militarily and politically—and the complexity of the geopolitical environment were sufficient to allow the organization to develop increasing robustness or density. It was al-Qa'ida's design competence—the ability of its agents to engage in imaginative and purposive adaptation in a violent and unpredictable environment—that made this transformation from brittle to robust possible.

¹⁰⁹ George Stein, *The Waffen SS: Hitler's Elite Guard at War 1939–1945* (Bristol, UK: Cerberus Publishing, 2002), 165–196, 283–296.

V. CONCLUSION

In this study, I have endeavored to show how the Qa'ida organization and its evolution after 9/11 are best understood through the lens of design theory and practice. That the organization has been able to remake itself in a profoundly hostile and unpredictable environment is a testament to its capacity to balance purposeful thought and action in pursuit of its insurgent aims. This study examined the ways in which the Qa'ida organization has demonstrated design orientation and competence through exploitation of a changing environment; purposive adaptation to diverse local conditions; and reconfiguration of its technology of warfare based on local experimentation and collective theory-building.

If the United States is to contend effectively with an evolving al-Qa'ida—let alone with the wider jihadist-Islamist insurgency in which it resides—its understanding of al-Qa'ida's pattern of reemergence must evolve apace. To take comprehensive stock of the Qa'ida insurgent phenomenon, the United States and its allies are compelled to step back to see clearly. The approach to date has tended to be myopic—the way the organization was designated and conceptualized was too narrowly focused. The use of the designation “terrorist” is a conceptual trap: at best, it streamlines the allocation and alignment of authorities and resources to meet lethal internal security challenges within a state security bureaucracy. However, it constrains holistic understanding of the problem at hand, including rigorous examination of how al-Qa'ida has redesigned itself to become an insurgent force with expansive potential. This trap is as relevant today as it was in the days and months after the 9/11 attacks. Policymakers and military leaders alike puzzle over the Islamic State group as actively as they did over the al-Qa'ida phenomenon when the latter first reared its head in a dramatic way.

In the meantime, as Western nations engage in a wide-ranging, running conflict in the Middle East, Asia and Africa, their actions are incrementally eroding the existing power structure. In order to achieve a lasting “victory”—a stable political arrangement—of any use, the United States and its allies are faced with few choices: either embark on a concerted and extensive *re-design* of the existing power structure, or

work indirectly through existing regional states to achieve an acceptable solution. Neither route is easy or inexpensive. Yet, if the United States proceeds along the current route—one that amounts to extended strategic raids into insurgent territories with little political consolidation to show for them—its actions will tend to grow the insurgency over time, not defeat it.

Future work ought to involve assembly of a multiple design thinking teams to triangulate on the problem of jihadi-Islamist insurgency. To date, the United States and its allies are captive to their own myopic vision of what al-Qa'ida and its allies truly are. Additional recommended research might examine Charles Tilly's and others' works on state formation theory from the perspective of the sub-state organizational level, including the rise of insurgencies through conflict.

LIST OF REFERENCES

- Ahmed, Akbar. *The Thistle and the Drone: How America's War on Terror Became a Global War on Tribal Islam*. New York, NY: HarperCollins, 2013.
- Al-Ahmed, Ali, Andrew Bond, and Daniel Morillo. *Security Threats to Saudi Arabia's Oil Infrastructure*. Washington, DC: Institute for Gulf Affairs, 2013.
- Al-Zayyat, Montasser. *The Road to Al-Qaeda: The Story of Bin Laden's Right-Hand Man*. Translated by Ahmed Fekry and Sara Nimis. London: Pluto Press, 2004.
- Anklam, Patti. *Net Work: A Practical Guide to Creating and Sustaining Networks at Work and in the World*. Burlington, MA: Elsevier, 2007.
- Arquilla, John. "The New Rules of War." *Foreign Policy*, February 11, 2010. Accessed December 15, 2015. <http://foreignpolicy.com/2010/02/11/the-new-rules-of-war/>.
- As-Sahab Media (Subcontinent). "An Exclusive Interview with Adam Yahye Gadahn." *Resurgence* (Summer 2015): 6–91.
- As-Sahab Media (Subcontinent). "Operation against the American Navy by the Mujahideen." *Resurgence* (Fall 2014): 8–9.
- As-Sahab Media (Subcontinent). "Strategic Overstretch in Guerilla Warfare." *Resurgence* (Fall 2014): 106–111.
- Atwan, Abdel Bari. *After Bin Laden: Al Qaeda, the Next Generation*. New York, NY: New Press, 2013.
- Azhar, Mobeen Azhar. "The School That Says Osama Bin Laden Was a Hero." *BBC*, November 12, 2014. <http://www.bbc.com/news/magazine-30005278>.
- Brooke, Steven. "Jihadist Strategic Debates before 9/11." *Studies in Conflict & Terrorism*, 31 (2008): 201–26.
- . "Strategic Fissures: The Near and Far Enemy Debate." In *Self-Inflicted Wounds: Debates and Divisions within Al-Qa'ida and Its Periphery*, edited by Assaf Moghadam and Brian Fishman, 45–68. West Point, NY: Combating Terrorism Center, 2010.
- Cafarella, Jennifer. "Jabhat al-Nusra deepens its foothold in northwestern Syria." *Institute for the Study of War*, November 10, 2014. Accessed December 18, 2015. www.understandingwar.org/backgrounders/jabhat-al-nusra-deepens-its-foothold-northwestern-syria.

- Carr, Caleb. *The Lessons of Terror: A History of Warfare against Civilians*. New York, NY: Random House, 2003.
- Chan, Serena. "Complex Adaptive Systems." Paper presented at the ESD.83 Research Seminar in Engineering Systems, Massachusetts Institute of Technology, Cambridge, Massachusetts, October 31–November 6, 2001.
- Child, John. "Strategic Choice in the Analysis of Action, Structure, Organizations and Environment: Retrospect and Prospect." *Organization Studies* 18 (1997): 43–76.
- Combating Terrorism Center at West Point, Harmony Document SOCOM-2012-0000004. "Letter from Adam Gadahn." Accessed January 6, 2016. <https://www.ctc.usma.edu/v2/wp-content/uploads/2013/10/Letter-from-Adam-Gadahn-Translation.pdf>.
- _____. Harmony Document SOCOM-2012-0000007. "Letter to Hakimullah Mahsud." Accessed January 6, 2016. <https://www.ctc.usma.edu/v2/wp-content/uploads/2013/10/Letter-to-Hakimullah-Mahsud-Translation.pdf>.
- _____. Harmony Document SOCOM-2012-0000009. "A Suggestion to Change the Name of al-Qa'ida." Accessed January 6, 2016. <https://www.ctc.usma.edu/v2/wp-content/uploads/2013/10/A-Suggestion-to-Change-the-Name-of-Al-Qa'ida-Translation.pdf>.
- _____. Harmony Document SOCOM-2012-0000010. "Letter from UBL to 'Atiyatullah Al-Libi 2.'" Accessed January 6, 2016. <https://www.ctc.usma.edu/v2/wp-content/uploads/2013/10/Letter-from-UBL-to-Atiyatullah-Al-Libi-2-Translation.pdf>.
- _____. Harmony Document SOCOM-2012-0000015. "Letter from UBL to 'Atiyatullah Al-Libi 3.'" Accessed January 6, 2016. <https://www.ctc.usma.edu/v2/wp-content/uploads/2013/10/Letter-from-UBL-to-Atiyatullah-Al-Libi-3-Translation1.pdf>.
- Fall, Bernard B. "The Theory and Practice of Insurgency and Counterinsurgency." Accessed December 18, 2015. <http://www.au.af.mil/au/awc/awcgate/navy/art5-w98.htm>.
- _____. *The Viet-Minh Regime; Government and Administration in the Democratic Republic of Vietnam*. New York, NY: The Institute of Pacific Relations, 1956.
- Ford, Daniel. *A Vision So Noble: John Boyd, the OODA Loop, and America's War on Terror*. Durham, NH: Warbird Books, 2014. Kindle edition.
- Gall, Carlotta. "The Detail in Seymour Hersh's Bin Laden Story That Rings True." *New York Times*, May 12, 2015. <http://www.nytimes.com/2015/05/12/magazine/the-detail-in-seymour-hershs-bin-laden-story-that-rings-true.html>.

- _____. *The Wrong War: America in Afghanistan, 2001–2014*. New York, NY: Houghton Mifflin Harcourt, 2014.
- Gall, Carlotta, Eric Schmitt, and Pir Zubair Sha. “Cellphone Offers Clues of Bin Laden’s Pakistan Ties.” *New York Times*, June 23, 2011. <http://www.nytimes.com/2011/06/24/world/asia/24pakistan.html>.
- Gartenstein-Ross, Daveed, Jason Fritz, Bridget Moreng, and Nathaniel Barr. “Islamic State vs. Al-Qaeda: Strategic Dimensions of a Patricidal Conflict.” *New America*, December 2015. Accessed December 19, 2015. <https://www.newamerica.org/international-security/islamic-state-vs-al-qaeda/>.
- Gerges, Fawaz. *The Far Enemy: Why Jihad Went Global*. London: Cambridge University Press, 2009.
- _____. *The Rise and Fall of Al-Qaeda*. Oxford: Oxford University Press, 2014.
- Hafez, Mohammed M. *Why Muslims Rebel: Repression and Resistance in the Islamic World*. Boulder, CO: Lynne Rienner, 2003.
- Haidar, Suhasini. “The Story That Killed Saleem Shahzad.” *Hindu*, June 2, 2011. Accessed December 18, 2015. <http://www.thehindu.com/opinion/op-ed/the-story-that-killed-saleem-shahzad/article2071460.ece>.
- Hamid, Mustafa, and Leah Farrall. *The Arabs at War in Afghanistan*. London: Hurst, 2015.
- Hanna, David P. *Designing Organizations for High Performance*. Reading, MA: Addison-Wesley, 1988.
- Hashem, Ali. “Al-Qaeda Theorist Calls for Infiltrating Political Systems.” *Al-Monitor*, May 29, 2015. Accessed December 18, 2015. <http://www.al-monitor.com/pulse/originals/2015/05/al-qaeda-political-system-infiltration.html>.
- Hegghammer, Thomas. *Jihad in Saudi Arabia: Violence and Pan-Islamism since 1979*. Cambridge: Cambridge University Press, 2010.
- _____. “Jihadism: Seven Assumptions Shaken by the Arab Spring.” *Project on Middle East Political Science*, February 3, 2014. Accessed December 18, 2015. <http://pomeps.org/2014/02/03/jihadism-seven-assumptions-shaken-by-the-arab-spring/>.
- _____. “The Ideological Hybridization of Jihadi Groups.” *Current Trends in Islamist Ideology*, 9 (2009): 1–11.
- Jamal, Arif. *Shadow War: The Untold Story of Jihad in Kashmir*. Brooklyn, NY: Melville House, 2009.

- Johnsen, Gregory D. *The Last Refuge: Yemen, Al-Qaeda, and America's War in Arabia*. New York, NY: W. W. Norton, 2012.
- Joscelyn, Thomas. "Al Nusrah Front Leader Renews Allegiance to al Qaeda, Rejects New Name." *Long War Journal*, April 10, 2013. Accessed December 18, 2015. http://www.longwarjournal.org/archives/2013/04/al_nusrah_front_lead.php.
- _____. "Al Qaeda's Plan for Libya Highlighted in Congressional Report." *Long War Journal*, September 21, 2012. Accessed December 18, 2015. http://www.longwarjournal.org/archives/2012/09al_qaedas_plan_for_1.php.
- _____. "US Counterterrorism Efforts in Syria: A Winning Strategy?" *Long War Journal*, September 29, 2015. Accessed September 29, 2015. <http://www.longwarjournal.org/archives/2015/09/us-counterterrorism-efforts-in-syria-a-winning-strategy.php>.
- Khan, Azmat. "New Evidence of Pakistan's Role in the Mumbai Attacks." *PBS*, June 28, 2012. Accessed December 19, 2015. www.pbs.org/wgbh/frontline/article/new-evidence-of-pakistans-role-in-the-mumbai-attacks/.
- Lahoud, Nelly. *The Jihadis' Path to Self-Destruction*. Oxford: Oxford University Press, 2010.
- Lamothe, Dan. "'Probably the Largest' Al-Qaeda Training Camp Ever Destroyed in Afghanistan." *Washington Post*, October 30, 2015. Accessed December 18, 2015. <https://www.washingtonpost.com/news/checkpoint/wp/2015/10/30/probably-the-largest-al-qaeda-training-camp-ever-destroyed-in-afghanistan/>.
- Leigh, Karen. "In Aarsal, a Common Enemy Faces Hezbollah and Lebanon's Army." *Syria Deeply*, August 5, 2014. Accessed December 18, 2015. <http://www.syriadeeply.org/articles/2014/08/5898/aarsal-common-enemy-faces-hezbollah-lebanons-army/>.
- Lia, Brynjar. *Architect of Global Jihad: The Life of Al-Qaida Strategist Abu Mus'ab Al-Suri*. New York, NY: Columbia University Press, 2008.
- _____. "Understanding Jihadi Proto-States." *Perspectives on Terrorism* 9 (2015): 30–40.
- Lia, Brynjar and Thomas Hegghammer. "Jihadi Strategic Studies: The Alleged al Qaeda Policy Study Preceding the Madrid Bombings." *Studies in Conflict and Terrorism* 27 (2004): 355–375.
- Luttwak, Edward. "Notes on Low Intensity Warfare." *Parameters* December (1983): 333–342.

- Mauro, Ryan. "Has Damascus Stopped Supporting Terrorists?" *Middle East Quarterly* 16 (2009): 61–67.
- Miller, John H. and Scott E. Page. *Complex Adaptive Systems: An Introduction to Computations Models of Social Life*. Princeton, NJ: Princeton University Press, 2007.
- Mintzberg, Henry. "Organization Design: Fashion or Fit?" *Harvard Business Review* January–February (1981).
- Moghadam, Assaf, and Brian Fishman, eds. *Self-Inflicted Wounds: Debates and Divisions within Al-Qa'ida and Its Periphery*. West Point, NY: Combating Terrorism Center, 2010.
- Mohamedou, Mohammad-Mahmoud Ould. *Understanding Al Qaeda: Changing War and Global Politics*. London: Pluto Press, 2014.
- Nelson, Harold G., and Erik Stolterman. *The Design Way: Intentional Change in an Unpredictable World*. Cambridge, MA: MIT Press, 2012.
- Omaar, Rageh. "Inside the Red Mosque." *Al Jazeera*, June 18, 2009. <http://www.aljazeera.com/programmes/witness/2007/07/200852517384913801.html>.
- Panda, Ankit. "Al Qaeda's Worrying Ability to Infiltrate the Pakistani Military." *Diplomat*, September 18, 2014. Accessed November 2, 2015. <http://thediplomat.com/2014/09/al-qaedas-worrying-ability-to-infiltrate-the-pakistani-military/>.
- Plattner, Hasso. "An Introduction to Design Thinking PROCESS GUIDE." *Institute of Design at Stanford*. Accessed December 10, 2015. <https://dschool.stanford.edu/sandbox/groups/designresources/wiki/36873/attachments/74b3d/ModeGuideBOOTCAMP2010L.pdf?sessionID=c2bb722c7c1ad51462291013c0eeb6c47f33e564>.
- Rana, Muhammad Amir, Safdar Sial, and Abdul Basit. *Dynamics of Taliban Insurgency in FATA*. Islamabad, Pakistan: Pak Institute for Peace Studies, 2010.
- Riedel, Bruce. "Al Qaeda 3.0: Terrorism's Emergent New Power Bases." *Brookings Institution*. Accessed October 21, 2015. <http://www.brookings.edu/research/opinions/2012/12/03-al-qaeda-terrorism-reidel>.
- _____. "The Continuing Evolution of Al-Qaeda 3.0 - Al-Monitor: The Pulse of the Middle East." *Al-Monitor*, January 3, 2014. <http://www.al-monitor.com/pulse/originals/2014/01/al-qaeda-terror-spread-iraq-lebanon.html>.
- Robb, John. *Brave New War: The Next Stage of Terrorism and the End of Globalization*. Hoboken, NJ: Wiley, 2008.

- _____. "The Open-Source War." *New York Times*, October 15, 2005.
<http://www.nytimes.com/2005/10/15/opinion/the-opensource-war.html>.
- Roggio, Bill. "Al Nusra Front Claims Complex Suicide Assault on Syrian Army HQ." *Long War Journal*, September 28, 2012. Accessed November 2, 2015.
http://www.longwarjournal.org/archives/2012/09/al_nusrah_front_clai_5.php.
- _____. "Al Qaeda Intelligence Chief Reported Killed in Drone Strike." *Long War Journal*, April 22, 2013. Accessed November 2, 2015.
http://www.longwarjournal.org/archives/2013/04/al_qaeda_intelligenc.php.
- _____. "Al Qaeda in the Indian Subcontinent Incorporates Regional Jihadist Groups." *Long War Journal*, September 5, 2014. Accessed December 18, 2015.
http://www.longwarjournal.org/archives/2014/09/analysis_al_qaeda_in.php.
- Roggio, Bill, and Patrick Megahan. "ISAF Raids against al Qaeda and Allies in Afghanistan 2007–2013," *Long War Journal*, May 30, 2014. Accessed December 18, 2015.
http://www.longwarjournal.org/archives/2014/05/al_qaeda_and_allies.php.
- Roggio, Bill and Thomas Joscelyn, "AQAP's Emir also Serves as al Qaeda's General Manager," *Long War Journal*, August 6, 2013. Accessed December 18, 2015.
http://www.longwarjournal.org/archives/2013/08/aqap_emir_also_serve.php.
- Scheuer, Michael. *Osama Bin Laden*. Oxford: Oxford University Press, 2011.
- Schmitt, Eric. "Leader of Qaeda cell in Syria, Muhsin al-Fadhli, Is Killed in Airstrike, U.S. Says," *New York Times*, July 21, 2015. http://www.nytimes.com/2015/07/22/world/middleeast/leader-of-qaeda-cell-in-syria-muhsin-al-fadhli-is-killed-in-airstrike-us-says.html?_r=0.
- Schwartz, Barry. "The Way We Think about Work Is Broken." *TED* video, 8:02, March 2015. http://www.ted.com/talks/barry_schwartz_the_way_we_think_about_work_is_broken.
- Shahzad, Syed Saleem. "Al Qaeda Has Warned of Pakistan Strike." *Asia Times Online*, May 27, 2011. Accessed December 18, 2015. http://www.atimes.com/atimes/South_Asia/ME27Df06.html.
- _____. *Inside Al-Qaeda and the Taliban: Beyond Bin Laden and 9/11*. New York, NY: Pluto Press, 2011.
- Siddique, Qandeel. "The Red Mosque Operation and Its Impact on the Growth of the Pakistani Taliban." *Norwegian Defense Research Establishment (FFI)*, October 8, 2008. Accessed December 18, 2015. <https://www.ffi.no/no/Rapporter/08-01915.pdf>.

- Stein, George. *The Waffen SS: Hitler's Elite Guard at War 1939–1945*. Bristol: Cerberus, 2002.
- Tankel, Stephen. "Going Native: The Pakistanization of Al-Qaeda." *War on the Rocks*, October 22, 2013. Accessed December 18, 2015. <http://warontherocks.com/2013/10/going-native-the-regionalization-of-al-qaeda/>.
- Tilly, Charles. *Coercion, Capital, and European States, AD 990–1992*. Cambridge, MA: Blackwell, 1992.
- U.S. Department of State. "Designations of Harakat-ul Jihad Islami (HUJI) and Its Leader Mohammad Ilyas Kashmiri." Accessed December 18, 2015. www.state.gov/r/pa/prs/ps/2010/08/145779.htm.
- _____. "Individuals and Entities Designated by the State Department Under E.O. 13224." Accessed December 16, 2015. <http://www.state.gov/j/ct/rls/other/des/143210.htm>.
- Wilkins, Warren. *Grab Their Belts to Fight Them: The Viet Cong's Big-Unit War Against the U.S., 1965–1966*. Annapolis, MD: Naval Institute Press, 2011.
- Wyke, Thomas. "Al-Qaeda in Indian Subcontinent Criticises Pakistani Taliban for Peshawar School Massacre." *International Business Times*, December 20, 2014. Accessed July 28, 2015. <http://www.ibtimes.co.uk/al-qaeda-indian-subcontinent-criticises-pakistani-taliban-peshawar-school-massacre-1480426>.

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California